

Harvests in Sweden before the Agrarian Revolution

**A statistical investigation of harvest-dependent tithes
from and including 1665**



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English	Swedish
“Sixman”, one of six peasant trustees in a parish	sexman
a small barrel old local?	fat
bailiff	fogde, befallningsman
barony	friherrskap
barrel, 36 kappes, 56 Swedish pottles, 146,6 L	Tunna
cadastral assessment unit	mantal
castle county = castle fief (compare County)	slottslän, "län"
copyholder	frälsebonde
county, administrative district introduced in the 1630s or later	län (compare "slottslän")
crown farmer	kronobonde
decibarrels	xxxxxx
excess measure, full measure	råga
freehold farmer	skattebonde
= 1/4 barrel	halvspann
harvest-dependent tithes	rörligt tionde
juryman	nämndeman
kappe = 1/32 barrel or 4.58 L	kappe
peasant farm/-er, peasant	bonde, hemman, gårdsbruk
reduced grain was a method to sum the volumes of the different kinds of grain according to their (standardized) market value: 1 barrel of rye = 1 barrel of barley = 2 barrels of oats = 1.5 barrels of mixed grain ("blandsäd") = 3/4 barrel of wheat.	"ren säd", "rågvärde",
country parish = annex to city parish	landsförsamlig
sheriff, county constable	länsman
xxxx	fjärdingsman
sheave	kärve, band, neke
shire	grevskap
= 1/4, 1/5, 1/6 or 1/8 of a barrel	skäppa
= 1/2 barrel	spann
A pastorat was one or several parishes united under a common head minister or vicar.	pastorat
stook	skyl, rök, trave
Swedish firkin = 1/8 of a barrel	fjarding
Swedish pottle = 1/56 barrel or 2.617 L	kanna
tithe barn	tiondelada
tunnland = 1,22 acre	tunnland
unreduced grain volumes summed without considering their value.	spannmål
vicarage	prästgård
yield, harvest/seed ratio	korntal

Report from Riksbankens Jubileumsfond's infrastructure project

A harvest index before the Agrarian Revolution: harvest-dependent tithes 1665-1800

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Databases

The results from the project includes extensive digital databases, free of charge accessible to all researchers after application to *The Swedish National Data Service (Svensk Nationell Datatjänst), SND*, Göteborgs universitet. E-post: snd@gu.se
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Swedish harvest-dependent tithes from and including 1665

Lennart Andersson Palm

The aim of the project

The aim of the project has been to construct databases on harvest-dependent tithes in Sweden (with the exception of Scania) at the parish level from 1665.

Tithes

Tithes according to the bible had to correspond to a tenth of the annual harvest. Grain tithes were probably introduced in Sweden in the thirteenth century. During the sixteenth century reformation, most of this tax was appropriated by the crown, instead of being a church tax in its totality as was the case previously. Henceforth normally two thirds of the tithes in Sweden the Crown tithes, went to the crown, one third to the parsons, often called the “tertial”.¹ Tithes were an important part of the clergy’s salaries. In the archives tithes has left behind it a vast source material. Tithes were variable or adjustable for a long time, that is, harvest-dependent, but they gradually turned into a fixed tax. Information on variable or harvest-dependent tithes can thus be used to follow the development of harvests during certain periods for which there are no reliable farming statistics.

The tithes system in 1665 and onwards

Our project starts in 1665, when measurements had been regulated and unified over the whole country. The 1638 tithes proclamation laid the foundations for the tithes system in Sweden during our entire investigation period.² However, the proclamation is not particularly detailed and more instructions were to follow on. A “patent” was issued in Gothenburg on the 15 May 1658. The patent contained a threat that tithes inspectors, who were crown officials who were to gather in the tithes for a commission, would be reinstated. This was because the farmers had not fulfilled the promises they had made to Parliament in 1644 in order to avoid crown officials’ involvement. On 30 June 1663 an *Instruction* was issued to the bailiffs alias crown tax leviers, since the 1658 decree had not been respected either.³ Despite this, no special tithes inspectors were appointed, but the district bailiffs had to carry out the inspections, with the help of the Instruction. The most important regulations to apply in 1665 were the following (reference to each respective decree year in parentheses):

- Tithes were to consist of “all kinds of Grain / Rye / Barley / Wheat / Oats, Peas / Beans ...” (1638). As we can see from extant tithes lists, practice has varied between different geographical areas.
- After the harvest and when the grain had been put to dry, the “sixmen”, elected parish representatives, had to estimate the amounts owed (see below) in each field. Where the parishes were wide-stretched, they asked for the assistance of lay assessors. If the men counting could not write, then they had to note the number of stooks as marks carved on sticks of wood (Sw. karvstock) while waiting for the tithes list to be written down. The bailiff was to be responsible for the counting being correctly carried out. If the men counting were found to have cheated, the bailiff was to inform the county governor

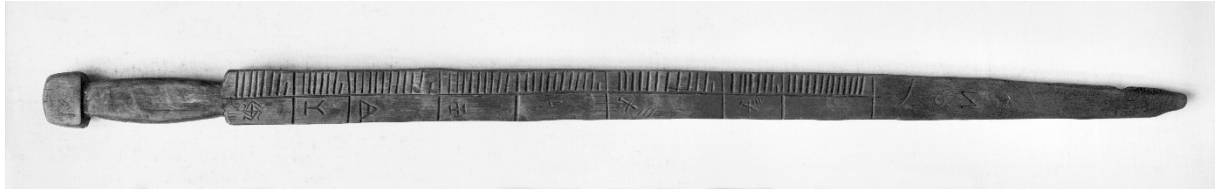
¹ In Danish and Norwegian territories later to be annexed by Sweden the proportion could vary.

² As e-book at Kungliga Biblioteket <http://weburn.kb.se/eod/5630/NLS15A025630.pdf> 2015-05-31.

³ ”Instruction hwarefter BefallningsMännen här uthj Sverige sigh medh Kyrkiotijondens Infordrandet, hwar uthj sitt fögderije skohle hafwa att rätta och regulera. Datum Stockholm den 30 Junj Anno 1663”. We have not found any printed version. Östergötlands landskansli, ank. skrivelser från kammarråd och reduktionskollegium 1661-64, volym 272, fol 143-146. VALA.

according to the statute's fourth point. The county governor would then appoint other persons to do a recount with the elected parish representatives and the lay assessors. The counting of the marks (see below) representing the number of stooks had to be correct. (1663) The grain on possible burnt fields had also to be correctly estimated. (1638, 1663)

Wooden Measuring Stick – “Karvstock”



Probably from Ljusdal in Hälsingland, 1627. Nordiska museet.

- After bringing in the harvest, “a test threshing” was to be made, which meant an investigation of how much threshed grain a stook or other unit gave on average. The test was to be carried out in the presence of the sheriff (Sw. “länsman”) who was the bailiff’s assistant in a certain part of his official duties. Two of the parish sixmen, six elected parish representatives, also had to be present. Another sheriff (Sw. “fjärdingsman”) helped the bailiff in a yet smaller part of his official duties. If the test showed that the yield differed between villages or peasant farms by $\frac{1}{2}$ or a $\frac{1}{4}$ Swedish firkin per stook, more tests had to be carried out, so that none of the common people had to pay too much. (1663) A Swedish firkin in this context was $\frac{1}{8}$ barrel. Test threshing could be done in the farmer’s own barn or in a specially established threshing barn in the church village. (1638)
- From the pulpits a meeting in parish premises was then to be called. There the tithes list based on the carved wooden measuring sticks and other information were to be written by the parish minister in the presence of the bailiff or his representative, the sheriff and some of the elected parish representatives mentioned, and also men of the parish, i.e. the peasantry. In connection with the setting-up of the lists, the results of the correct tests were to be read out and written down in the tithes list (1663). The list was read out “so that all might know what Tithes one or other”, i.e. the neighbours, “has paid”. (1638) The idea was that they were to betray each other if anyone reported figures that were too low.
- All the farms and crofts were to be written down in the tithes list, including manor estates and the farms belonging to them. The number of stooks was to be written down in one column, the test in another and all grains in different columns for each type, as well as finally how much each peasant farm or croft and its residents ought to pay. The list was to be signed and sealed by the parish ministers as well as having the sixmen’s names and house marks. The bad habit “That a majority of the ministers have written down and formed the lists only according to what the common people have provided and delivered to the church storehouses”, i.e. without control of how the tithes were estimated in the fields, was forbidden thereafter. The original lists were then to be sent to the head of the district (Sw. “härad”) bailiwick for further forwarding to the county council clerk. Copies were not accepted. (1663)
- According to the 1590 tithes mandate, provosts and district judges were to warn and tell farmers to “be prepared to swear an oath on the statute book (Sw. “lagbok”) that they had paid the correct tithes”. Swearing an oath has been considered to be an important method for pressurising the peasantry not to cheat with their tithes. Where was this oath sworn? It was to be dictated to them at the district court’s (Sw. “häradsrätten”) autumn

assizes “after the manner laid down in the old statute books”.⁴ Since all peasant farmers scarcely attended every assizes, we must assume that it may have taken place in some other way. It was probably only the tithes assessors, especially the sixmen, who had to swear the oath on behalf of their parishioners.⁵

- The timing of the collection does not seem to have been regulated more exactly. Many tithes lists are dated from December the year of the harvest. The collection was to take place in the presence of the district bailiff, the parson and the sixmen. (1638). Each tithe barn (not to be confused with the threshing barn advocated by the crown, see below!), had to have three locks and keys, of which one was held by the district bailiff, one by “whoever is assigned to the church storeroom” or his proxy, and the third by the six elected parish representatives. The tithe barn could thus only be opened by all of these or their proxies at the same time. (1663) It seems to have been so self-evident that the tithes list was to be present at the collection that it is not mentioned directly in the statutes. On the other hand, it was stipulated that in order to keep a check, the parson was to give the district bailiff information about how much his third had provided after threshing so that the crown’s tithes would match it proportionally. (1638). The parson of course fetched his own allocation of stooks from the field directly after the drying process of the grain. The bailiff had to see to it that the peasantry did not hand over their most inferior grain for the tithes but according to “how that year’s growth had been”, so that those receiving the tithes (the institutions or persons who had been allotted tithes by the crown) had no reason to complain. If a peasant farmer did not pay, he would be written down on a default list as with other taxes. (1663)
- Along with the farms that the clergy used – the vicarage itself and other farms with which the clergy had been endowed as an allowance – the farms of the nobility, the manor itself and its copyholder farms situated in the same village as the manor, were also exempt from tithes. In principle all other farms were to pay, “whether High or Low”, from the household servants of the nobility down to a peasant farmer’s hired farmhands. Others who wished to avoid tithes must be able to show a special letter from the king to this effect. (1638)
- With consideration to the complaints that were often made about the use of various measuring vessels, a new and correctly adjusted barrel and smaller vessels were to be purchased and handed in to each tithe barn just before the coming Michaelmass (29 September), all paid for out of the tithe barn’s unreduced funds, i.e. by the tithes received. The vessels were to match in volume those vessels sent by the king to the county governors, and their volumes were to be checked and adjusted in the presence of the county governor or his proxy. (1663)
- Regarding “the filling up of the barrel measure”, in Swedish “råga”, the extra grain that was traditionally added to the barrels delivered during trade or in tithing (see the pointer further on), the following was to be observed: the tithes were to be delivered “without any stopping or shaking / however, when delivering, ... two Finsche *kappe* / should be given instead of the filling up and loss from every barrel”. (1638; a *kappe* = 1/32 barrel) The persons or institutions to which the Crown tithes were allotted were also to receive the extra grain. The only exception was if the extra grain was expressly not included in a

⁴ Björn Helmfrid 1949, p. 39.

⁵ One example: *Anno 1692 den 29 Februarii hölls Laga Ting med Allmogen av Grundsunda Tingelag uti dess Länsmansgård Önskan av Häradshövdingen Carl Stridsberg och vanlig Häradsnämd: § 12 De som varit nämnde till tionderäknare och voro kommet tillstädes avlade sin ed att redeligen och oppriktigt därmed omgås. Men följande varit nämnde efter Länsmans och Sockenskrivarens intygande och intet kommit tillstädes gjordes saker till sina - 3 marker smt vardera, näml: Nils Jöransson i Ellön 3 marker, Michel Olofsson i Banafjäl - 3 marker, Nils Siuhlsson i Husom - 3 marker, Olof Pedersson i Skademark - 3 marker i förmågo av det - 33 Cap: av Tingm b. <http://www.sikhallan.se/GRTingsprotokoll/DBG1692V.htm>. (February 7, 2016)*

certain recipient's tithes but was reserved for the crown for "other expenses".⁶ (1663)
The recipients might be regiments or schools etc.

- The 1638 statute was to be read out aloud in the churches once a year and in particular when tithes were due to be exacted. (1663)
- The 1638 statute was to be read out aloud in the churches once a year and in particular when tithes were due to be exacted. (1663)
- Under threat of punishment, the bailiffs were forbidden to receive any tithes before everything had been delivered into the tithe barn. (1663)

The main ordinances to be published after those named above contain in principle the same prescriptions regarding the tithes. The most important of them were the following:

*Kongl. May:tz nådige Instruction För Häradzfogderne wid deras Tienstern och Embetens Förrättningar. Gifwen Stockholm den 9 Octobris, Åhr 1688.*⁷ (His Majesty's gracious Instruction For District Bailiffs during the Execution of their Service and Office. Stockholm 9 October 1688)

Form, eller methode till kyrckio-tijonde längdernes inrättande hwar på instructionerne både för häradzfogdarne uti den 3 puncten 2. §. som ock för häradzskrifwarne i den 4 puncten sig beropa.(1688)⁸ (Form or method for the construction of the church tithes lists of which instructions both district bailiffs in point 3, para 2, and also district scribes in point 4, are to be relied upon.(1688))

*Kongl. May:tz Instruction, Häradz-Skrifwarne wid deras Tienstern Förrättningar til Effterrättelse. Gifwen Stockholm den 16 Octobris, Åhr 1689.*⁹ (His Majesty's Instruction, for District Scribes to follow during the Execution of their Duties. Stockholm 16 October 1689).

Stooks, sheaves etc

As has been described above, part of the assessment of tithes was to estimate the harvest put out to dry in the fields in various forms. The most common Swedish units were the stooks – Sw. *skyl*, *trave* and *rök*, composed of sheaves, Sw. *kärve*, *band*, *neke*.¹⁰ What were they? After harvesting, the grain was first tied into sheaves. The sheaves were then set out to dry in different ways in different kinds of stooks. The most common Swedish stooks are shown below:

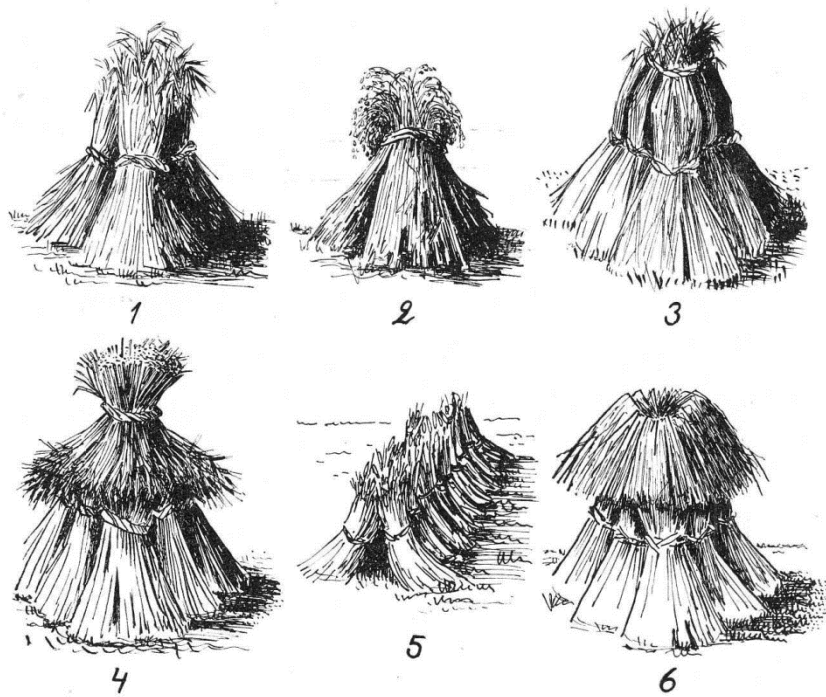
⁶ Sometimes it occurred that the excess measures were not counted on so-called "grann säd", that is small or thin, very bad quality grain. See extract for Aska and Göstring districts 1718, p. 1248, RA. Hellenius 1801 writes, p. 22, about grain that leaves "worthless straw... easily pushed over, (and) often then overdried and always giving very little and "grann" grain."

⁷ Now as an e-book on Internet: <http://hdl.handle.net/2077/38396>

⁸ Now as an e-book on Internet: <http://hdl.handle.net/2077/38394>

⁹ Now as an e-book on Internet: <http://hdl.handle.net/2077/38395>

¹⁰ Cf. *SAOB* under each term.



Simple Swedish stook types: 1 Klocka; 2 Krokstad nek; 3 Toppbunden trindskyl; 4 Enkel spetshatt; 5 Kamskyl eller trave; 6 Krängd hattskyl. Mattisson 1953, p. 86 (after C.G. Lekholm).

In Norrland there were several variants of drying method, see the chapter on Västerbotten further on.

“Embezzlement” – how much grain remained unreported?

Gustav Vasa (king 1523-1560) was one of the first to suspect that the peasant farmers were paying too little as tithes.¹¹ Despite swearing the oath and the parson’s certification, there were a number of serious gaps in the control system. One was the assessment of the number of stooks out in the fields: were there controllers in all the parishes? Did they have time for everything? Did they know about all the small field patches in more sparsely populated forested areas? Were they meticulous? During one and a half centuries after Gustav Vasa the crown tried new methods and increased controls to raise the provision of tithes.

According to the peasant farmers themselves, the largest “embezzlements” of tithes depended on the estate owners who considered themselves exempt from tithes duties. One statement from the peasantry in 1638 declared that the nobility excluded their own manor estates with appurtenant peasant farms and crofts and sometimes even disguised crop cultivation on deserted farms outside their proper domains. Other groups might also exempt themselves, such as cavalry, soldiers, bailiffs and officers etc. According to the peasant farmers, this was an important cause of the crown’s sometimes decreasing tithes levy.¹² The last-named categories’ exemption ran counter to the decreed statutes. The government was aware of this and tried to limit the number of people exempted and made clear, in among others the 1638 tithes proclamation, that by and large only manors run by the nobility themselves, their appurtenant peasant farms and crofts as well as vicarages, and likewise

¹¹ Among other things, he demanded that grain information be handed in for control, see e.g. Myrdal 1991, p. 276 ff.

¹² Björn Helmfrid 1949 pp. 42, 44, 57.

naturally the crown's own castles and royal farms, were exempt from tithes. Even the military and civil servants were duty-bound to pay their tithes.¹³

In order to check that all farms were included in the tithes taxations, the tithes lists were constructed on the same pattern as the Crown's cadastres, which were intended to cover all settlements of the kingdom. This took place as early as the sixteenth century. According to the 1663 Instruction and following statutes, the Crown tithes lists were to account for all those exempted, but that was not always the case even in the eighteenth century.¹⁴ Nor were which causes were invoked in order for a certain farm not to pay: was a "zero" decimant, tithes-giver, exempted on account of some privilege given or was he struck by a bad harvest? In many cases, this is impossible to clarify.

As early as 1594, an important method of control was introduced. As has been mentioned, it was then established that the clergy were to construct "certain registers", also over their own part of the tithes, the "tertial". The directive pointed at the possibility of control in *a comparison of the crown's tithes with what the parson had taken in* and this demand was repeated in 1638 and onwards. The parson was assumed to have strong interests of his own to take out his own part of the tithes with maximal effectivity. If the parson had such a register with him at the collection, this constituted a simple way of checking that every peasant farmer handed in double the amount of Crown tithes grain as a rule compared with what the parson had received.

However, the clergy's "registers" used only to record the number of tithes sheaves etc. that they fetched in the fields of the various farms. To keep the various farms' sheaves separate from each other at the vicarage and also from the vicarage's own grain production, and to thresh the tithes separately was normally impossible in practice. What this comparison provided was only that the number of sheaves in the crown's tithes had been correctly estimated.

How much grain did each stook provide? The yield per unit varied between farms. Tithes were frowned upon as a charge and in the threshing it was a great temptation for the peasant farmer to hand over too little grain.¹⁶ The crown used test threshing more and more often as an important method of control. Via test threshing here and there in a parish, with a representative number of units, an average amount of grain per unit was measured, which, multiplied by the crown's number of units resulted in the amount of grain the crown could demand.¹⁷ In order to gain a better grip on the threshing process, the crown decided in 1627 besides that *a special threshing barn* should be constructed in each parish to which the Crown tithes should be delivered after the harvest and where it should be threshed under strict control.¹⁸ It is not clear how many such barns were built. In reality, the tests were probably made in the peasant farmers' barns but only in the presence of the usual tithes controllers. The barn decree was repeated in later statutes.

Altogether, the control measures taken above must have given the crown considerable control over the tithes. However, were they implemented? What was the practice locally? For Östergötland, the 1630 special lists over "the peasantry's number of stooks etc and their "threshed reduced grain" were added to the preserved Crown tithes lists. (for reduced grain, see 0000000)¹⁹ In several parts of the country, similar thorough test threshings took place at the end of the century. Each farm's tithes threshing clearly occurred separately. Such thorough test threshing was however unusual. Instead, scattered spot-checks were more

¹³ Kongl. M.ts til Sverige ORDNING och Stadga om Kyrkiotijenderne i Rijkedh/ giord på Rijkzdaghen vthi Stockholm Åhr M.D.C. XXXVIII (årstrycket 22/2 1638).

¹⁴ On exemptions, underestimates etc. see Palm 1993.

¹⁶ That peasants did not want to pay tithes is shown in many examples e.g. in the tithes lists för Värmdö 1619 (Palm 2012, p. 47).

¹⁷ Compare the chapter on Halland further on. From this province there are examples that parsons took out more than their lawful allowance and probably the crown less.

¹⁸ Björn Helmfrid 1949, p. 48.

¹⁹ Björn Helmfrid 1949, p. 49.

common. In an account from 1638, the country's peasant members of Parliament declared that test threshing occurred in several unfortunately unspecified parts of the country. For Uppland it was declared that the yield per stook was estimated according to a fixed model: a stook was half a spann of grain both in "good and bad years" (which at least must have meant a certain equalisation over the years).²⁰ David Hannerberg, a cultural geographer, mentions sporadic information on test threshing in Närke during the 17th century.²¹ In this project we have made the assessment that test threshing was carried out in the whole country from the 1680s.

The counting of stooks and test threshing could be simplified through practical roundings-off, probably downwards as a rule. The historian Jan Lindegren found in his investigation of Bygdeå in Västerbotten in the 1620s and 1630s that this might involve considerable underrating.²² According to Lindegren, underrating resulted partly a) through the tenth stook always being put aside and that often thereby no tithes counted from the stooks that exceeded exactly ten in number, and partly b) through measurement of the threshed grain with relatively crude measuring vessels when it was delivered to the tithe barn. If the smallest vessel was e.g. a Swedish firkin, i.e. an eighth of a barrel, the measuring stopped when the vessel was full, and the tithes exceeding that were possibly not estimated. The total underrating in Bygdeå in 1627-1639 varied according to Lindegren between 9.7 and 26 % with the average of 15.6 and the median being 14.5. Björn Helmfrid discussed the same problem, but pointed out that the stooks in among others Östergötland and Uppland were composed of sheaves of which every tenth might continue to be taken after the tenth stook had been counted. That would diminish some of these threshold effects. He considered that in the worst case, if the rounding-off was done downwards, the tithes in his area in Östergötland would need to be increased by 5 % to compensate for the reduction.²³

From and including the end of the 17th century, it is possible to establish that the state leadership in a certain sense began to give up when in many areas it introduced so-called fixed tithes (see below). Its control had by then indeed become very effective, but at altogether too high a price. The control apparatus laid claim to extensive personnel resources, and grain might be destroyed on rainy and windy fields when the assessment and control measures dragged out in time. Among the advantages of fixed tithes was mentioned in 1717 also that the consciences of the peasantry were no longer to be troubled with "swearing oaths and assertions", i.e. the obligatory oath-taking.²⁴ The harvest-dependent tithes' complicated and labour-intensive assessments in the fields etc. ceased therefore in several areas before the mid-1700s. The fixed tithes were set low enough for the peasant farmers to manage to pay them in both "good times and bad". The introduction demanded the approval of the farmers, "accord", and could crave lengthy negotiations.

When did a region obtain fixed tithes? This is not always that easy to ascertain. Sometimes it happened that fixed tithes were introduced in a parish and adhered to for a year or so, after which harvest-dependent tithes reappeared. It is thus impossible to be satisfied with outright acceptance of the fact the tithes had become fixed just because one tithes list with fixed tithes has been discovered for one year. When the fixed tithes had actually been

²⁰ Björn Helmfrid 1949, p. 56.

²¹ Hannerberg 1941, p. 199 f.

²² Lindegren 1980, ch 6.1.

²³ Björn Helmfrid 1949, p. 25, p. 79 ff. establishes for his area of investigation that roundings-off to level Swedish half-firkins could occur at test threshings, but found that this only affected the yield estimate a percent or so up or down. It was worse if the number of stooks was evened out between values like 15, 30, 45 etc. This latter he found more common from the 1740s onwards. These mistakes were however well compensated for according to Helmfrid (p. 101) if the tithes barrels are assumed to have been brimful instead of being loosely filled and levelled off as they were in reality. (He does not seem to discuss the significance of the 1730s' measurement changes. Lindegren 1980, p. 217 f. assumed that threshold effects could be percentually greater in bad harvest years, but Björn Helmfrid, 1949, p. 97, found no such connection.

²⁴ Kalmar länsstyrelses arkiv, landskontoret, Handlingar angående tionde 1701-1749, VALA.

settled, they were linked to various **farms' mantals, their cadastral tax assessment units**. When the mantals of land “were negotiated”, or reduced e.g. temporarily one or two years if for instance a farm had burnt down, then the fixed tithes were also reduced. Minor variations in a series of tithes do not therefore reveal per se if the tithes are fixed or harvest-dependent. When the tithes in this project have been followed forward in time for one area and fixed tithes seem to have been introduced, it has only been possible to follow a few further years to check whether or not fixed tithes have become permanent, for reasons of work economy. Sometimes it happened that some farms in a parish held onto the harvest-dependent tithes whereas others progressed to fixed tithes. In many of the following county chapters, such cases appear. A closer investigation on the individual farm level would provide further information during a number of years for the farms that continued with harvest-dependent tithes. This has not been possible within the framework of this project's resources either.

A wave of fixed tithes introductions rolled over the country in the 1680s and 1690s. However, large areas held onto harvest-dependent tithes. In December 1717 Parliament ordered the Government via the Kammarkollegiet (the Legal, Financial and Administrative Services Agency) that all the provinces that had not yet implemented fixed tithes were to do so forthwith. The basis for calculation was to be each peasant farm's “goodness and quality” and tithes were set either in money in good times and bad, or in grain in natura. However, as appears in various places in the following county and province descriptions, varying methods were used. Besides, the Government's proposals had little success in certain parts of the country. In northern Sweden in particular, a number of areas continued with harvest-dependent tithes well on into the 19th century.

Source materials

County accounts

The main materials used for the project's databases are the county accounts covering the crown's incomes. Two versions of the accounts for our period of investigation have been preserved, one in the Riksarkivet, the central national archives' series *Länsräkenskaper*), and the other in the *länsstyrelse* archives, that is the county councils' *landskontor* archives in the National archive's regional archives, the *landsarkiven*. The versions consist partly of ledgers, *landsböcker* – the county's incomes and costs in summary – partly of verifications for the ledgers, the *landsboksverifikation*er. The information used by the project first and foremost are the parish-wise summaries, tithes extracts, that can be found either in the county accounts books or in the verifications. In exceptional cases, we have used the tithes lists themselves that are included in the verifications.

Certain tithes accounts are labelled “förslag”, “suggestions”. This should not be misunderstood. Suggestions today may sometimes refer to a budget or an estimation, but it is clear from our investigated materials that the concept there refers to the bailiff's final account to the county office based on the tithes lists. “Suggestion” must then be interpreted as the tithes accounts being preliminary in the sense that the bailiff's compilation is to be examined by e.g. the Kammarkollegiet.

Here below can first be seen photos of tithes lists as they normally looked when the form had been specified in the statutes from and including 1663 – before that they could be considerably simpler, with columns only for the farms, the names of the decimants and the tithes sums.

Figure 1. The full tithes list from Norrala parish 1700

The image shows two pages of a handwritten tithes list from Norrala parish, 1700. The left page is numbered 243 and the right page is numbered 244. The text is in Swedish and lists various farms and their corresponding tithes. The list is organized into columns, with the first column containing the names of the farms and the subsequent columns containing numerical values representing the tithes. The handwriting is in a cursive script typical of the 18th century. The right page also includes a section with names of individuals, possibly related to the tithes or the parish records.

Source: Gävleborgs läns landskontor, landsboksverifikationer, HÄL

The list for Norrala parish in southern Hälsingland lists first farms and their peasant farmers, in the next column the farm's taxation given in the local assessment unit, here not as in most

sum of the excess measure (see also further on) paid by the peasant farmers upon delivery to the tithe barn (here 2 kappe per barrel containing 32 kappe) as well as the fee to the Stockholm Orphanage equivalent to a fortieth part of the tithes plus the excess grain that had to be added to this fee.

Figure 3 Tithes Extract for Hälsingland's Southern Deanery 1700

Debet		Credit	
Uppsala	97 1 3	Uppsala	57 1 1
Skog	67 1 3	Academia	10
Skog	258 3 4	Academia	6
Skog	180 7 6	Academia	3
Skog	90 6 2	Academia	3
Skog	145 4 2	Academia	3
Skog	800 3 42	Academia	3
Skog	44 3 42	Academia	3
Summa	708 3 42	Summa	708 3 42
Uppsala Stifts Skolar	42 2 7	Gymnasium	12
Skog	64 3 6	Gymnasium	12
Skog	128 3 3	Gymnasium	12
Skog	71 4 6	Gymnasium	12
Skog	97 5 6	Gymnasium	12
Skog	98 1 1	Gymnasium	12
Skog	64 7 4	Gymnasium	12
Skog	64 4 4	Gymnasium	12
Summa	732 6 54	Summa	732 6 54

Source: Gävleborgs läns landskontor, landsboksverifikation, HÄL

Tithes from the parishes could be permanently allotted to different institutions, particularly schools and regiments. In the Extract above it is shown that some parishes' tithes were allocated to Uppsala Academy and the Uppsala church diocese's schools and colleges. Only the parish Undersvik's tithes went to the crown for free use. A "customary reduction" that is commonly shown among other such is the so-called "parsons' remuneration", "präster nas vederlag". For the parish "Skoug", today's Skog, it has been shown that its 12 barrels of remuneration "were revoked", i.e., had been rescinded by the crown and withdrawn from the tithes allocated to Uppsala Gymnasium (on the credit side down on the right). **This "vederlag" shall not be confused with the parson's third of the total tithes.**

On the Extract's last page can be seen how the tithes from Undersvik parish, retained by the Crown, along with the "revoked" 12 barrels from Skog, were carried over to "Novo Conto"

kingdom” should be allotted to these two recipients.²⁷ For a period it was unclear from which section of the tithes this fortieth part was to be estimated. Here and there, it sometimes happened at first that the bailiffs only estimated it on the remaining tithes i.e. what was left after “the customary reductions”. On 1 September 1664, a royal resolution established however as a response to the clergy’s appeal that the fee was to be based on the whole tithes sum before all reductions.²⁸ However, there was a long delay in some bailiwicks before this was carried out (see below the separate county chapters).

The Soldiers’ home and Orphanage barrels are normally accounted for in the form of bailiwick-based Extracts.²⁹

Figure 5. Extract from Stockholm Orphanage archives, Orphanage barrels from Västernorrland county 1700

*Specification och Abkrattning
år Barnhusets 40^{de} del för År 1700.*

Parish	Item	Value
Västernorrland	35 2/3 ^{te} Penningar	35 2/3
	11 1/2 ^{te} Gulden	38
	1 1/2 ^{te} Gulden	1 1/2
Jellingelands Södra	39 7/10 ^{te} Penningar	39 7/10
	1 7/10 ^{te} Gulden	38
	1 4/10 ^{te} Gulden	1 4/10
Jellingelands Norra	20 4/10 ^{te} Penningar	20 4/10
	1 1/10 ^{te} Gulden	38
	5 1/10 ^{te} Gulden	5 1/10

Transport 302

Source: Stockholms barnhus, Huvudbok 1701, SSA

contribution. This was further confirmed in a royal missive on 13 January 1705. (Thurgren 1859 p. 37). To which degree Halland’s and Gotland’s possible fees were shown in the Orphanage accounts in SSA has not been investigated in this project.

²⁷ Lars Gustaf Linde 1887, p. 303.

²⁸ Lars Gustaf Linde 1887, p. 303, n. 6.

²⁹ Comparisons between tithes accounts in the National Archives’ verifications and fees information in the Soldiers’ home’s accounts show that the latter refer to the same year as the **county** office’s tithes. Concerning the Orphanage’s accounts, the following discrepancies must be observed: in the Orphanage’s main ledger for 1675 p. 440 it is said that the main ledgers for 1667-1675 have included the Orphanage barrel for the same years’ tithes, i.e. the main ledger’s years correspond to the harvest year and its tithes. However, on account of late accounting from the county offices, the accounting was changed so that each respective harvest year’s tithes and the Orphanage barrel estimated according to that came to be shown in the main ledger dated the year *after* the harvest year. The 1676 Orphanage part of this year’s tithes must thus be sought in the 1677 main ledger etc.

To the far left in this Extract from the Stockholm Orphanage archives, we find the following figures under Södra Hälsingland's "contract", i.e. bailiwick: 39 barrels, 7 Swedish firkins and 1 9/10 Swedish pottle grain, 1 barrel, 7 Swedish firkins peas and 1 barrel 4 9/20 Swedish pottles oats, including excess measure. We recognise this figure from the reduction columns in the crown accounts' Extract in figure 2 above. Multiplied by 40, the tithes for the whole deanery are shown in the same figure, c. 1,596 barrels of grain, 76 of peas and 43 of oats. Here it is shown how the Orphanage (and the Soldiers' home's) accounts, can be used to estimate tithes for a bailiwick, sometimes even for parishes, where other tithes information has been lost.

Sometimes tithes information has also been preserved in other tithes recipients' archives: hospitals, regiments, schools etc. One problem with these accounts is that these archives are dispersed and have often been lost. Unfortunately, many of the accounts have been included in the county accounts with all their gaps and damage. However, some bigger archives still exist in other places. Most known is perhaps Uppsala Academy's accounts that have been processed by Astrid Hegardt.³⁰ For the former Norwegian and Danish provinces Jämtland and Härjedalen, Bohuslän and the Scanian counties, where the part of the tithes that were to be handed in to the local church were proportional to the harvest-dependent tithes, information can be found in the church archives. In some of the archives from these areas, the ministers' accounts of their part of the tithes have in exceptional cases also been preserved. Such information is taken advantage of in the following chapter on Halland and in another project on Scania.³¹ When they have been used is apparent in the various county reports following below.

Sometimes source materials are totally lacking or nowadays closed to research, "marked in black", sometimes materials open for use have been damaged. It may be a case of missing pages, fire damage, pages stuck together by melted sealing wax, attacks by rodents, or also mould infestation from which the spores have made the underlying text almost illegible. In cases of mould, we have sometimes had to work in special hoods. Hard bookbinding has not seldom hidden important figures in the text.³²

Harvest estimations based on tithes

Even in the early eighteenth-century geographers considered that they were able to assess harvests from harvest-related tithes.³³ Later researchers have attempted the same thing. The most well-known estimation is that by Hans Forssell's in his classic work "Sverige 1571".³⁴ Björn Helmfrid's conclusion was that tithes estimations, despite all and at least if stook counting took place, can "be considered to reflect well the cultivated soil's changing yield ratios". Attention should also be paid however to the fact that not all peasant farms paid tithes, that not all crops were tithes-bound and that roundings-off downwards occurred during estimation. He substantiates his conclusion through the estimation of yields and consumption capacity.³⁵ Among others David Hannerberg was also positive to the use of tithes for harvest calculations.³⁶ Hannerberg considered that tithes gave as good estimations of total harvests as

³⁰ Hegardt 1975. The original accounts are kept in the Uppsala University Archives in Uppsala.

³¹ The project *Historical Database of Scanian Agriculture*, Mats Olsson and Patrick Svensson, Economic historical institution at the University of Lund.

³² When columns for skäppas, Swedish firkins or lesser measurements have been hidden by tight bookbinding or damage, an average has sometimes been used, e.g. for Swedish firkins 3.5, since there were 8 Swedish firkins to a barrel and the Swedish firkin figure can then be 7 at most; half of 7 is 3.5.

³³ See Martin Linde 2011.

³⁴ Hans Forssell 1872-1883, p. 348 f. He also made harvest calculations for Norrland for the 1600s and 1700s (Hans Forssell 1872 B).

³⁵ Björn Helmfrid 1949, p. 167.

³⁶ Hannerberg 1941, p. 199 ff. and 1959, p. 97; Among other users we note Lagerstedt 1942; Westin 1943; Bertil Hedenstierna 1949; Yngve Nilsson 1950; Dagny Hedenstierna 1950; Lagerstedt 1955 and Montelius 1962, p. 62 ff. Staffan Helmfrid 1962, p. 43 f. was somewhat sceptical.

modern farming statistics, even though they were 20 % too low. The historian Lars-Olof Larsson was also positive: tithes lists "... constitute a very good index of the harvest result on the whole ...".³⁷ Jan Lindegren considered tithes as patently useful for harvest estimations, given that a number of additions were made and that seed information was taken note of.³⁸ Also the economic historian Johan Söderberg considered that in comparison with other information, the underestimation that marks the tithes lists is "surprisingly small".³⁹ The agrarian historian Lotta Leijonhufvud considers that tithes lists are at least fit to estimate the harvest *trend* over time.⁴⁰ Later Hannerberg became more sceptical to the material; others, among them Axel Wennberg and Lennart Palm, were even more pessimistic.⁴¹ Palm, who studied the province of Västergötland, was however more optimistic concerning other areas (See chapters further on on Västergötland and Småland). *The conclusion of the present project is that tithes information from the period investigated, adjusted in certain ways, constitutes a very good index for the harvest development of most of the counties in the country, and an excellent basis for very realistic harvest estimations.*

The greatest problem with the harvest estimations are *the tithes-exempt farms*. I will return below to how the project has taken these into consideration in its harvest estimations.

Another problem that was difficult to solve is the uncertainty that follows from the *standardisation of yield* per stook that occurred in some areas e.g. in Uppland where according to information in 1638 they estimated half a *spann* of grain from every stook in both "good years and bad".⁴² The historian Björn Helmfrid found examples of this in some parishes in Östergötland in 1704 and in Östra Eneby he found an increasing tendency towards standardisation from and including the 1730s.⁴³ He tried also to decide the size of the miscalculation in connection with harvest estimations. It appeared that the average miscalculation during the period with a high degree of standardisation remained around 4 %, and only in exceptional cases fell outside the interval 6.5–2.5 %. Together with the roundings-off at the estimation of the number of stooks, he was of the opinion that if one consistently estimates "tithes- and 'harvest figures', as brimful instead of levelled-off, then one should fully compensate the sources of miscalculation". That large amounts of tithes grain were withheld may "own certain validity in areas where standardisation has gone so far

³⁷ Larsson 1972, p. 151.

³⁸ Lindegren 1980, ch. 6.1.

³⁹ Söderberg 1999, p. 112 ff.

⁴⁰ Leijonhufvud 2001.

⁴¹ Wennberg 1947, Palm 1993. Hannerberg 1971 (p. 81) talks about a necessary supplement of 30 %. Wennberg was very critical to tithes lists as a source for harvest estimations. He mentions weak results of test threshing in western Östergötland during the later part of the 1600s and sinking tax levy as signs of tithes' inadequacy in this context. The results of the fixed tithes setting may be considered to back up Wennberg's criticism of harvest-dependent tithes: tithes setting resulted in increases of 10-33 % compared with harvest-dependent tithes in 1651-1670. For Kville parish, fixed tithes were probably about 10 % more than harvest-dependent ones. One should then however bear in mind that fixed tithes were based on purely mathematical calculations. The Crown demanded an increase of the tithes, and the peasants, when agreeing to an "accord" about fixed tithes, found an increase worthwhile as they escaped stook-counting and other control during the sensitive and stressful time of bringing in the harvest. Older yield figures would give a better picture even for the end of the 17th century, is Wennberg's conclusion. He considered also that the withdrawal percentage for tithes was lowered in connection with crises but that this should not be seen as cheating; the crown could not allow people to starve to death. In bad years, the crown and other tithes recipients were satisfied with smaller tithes than they formally had the right to. (Wennberg 1946, p. 75 f, n. 30, *ibid.*, 1947, p. 190 ff.) Björn Helmfrid found however nothing similar for Östra Eneby. He established admittedly also a "strong decline" in tithes towards the end of the 1600s, but interpreted this as a sign that the yield was in fact declining in the county. Helmfrid did not agree with Wennberg's presentation which he found fragmentary and misleading (Björn Helmfrid 1949, pp. 129, 132 f, 167). County governor Stålmarm pointed out a development similar to Helmfrid's in most of the counties despite more thorough controls introduced in the tithes statutes around 1690.

⁴² See chapter on Stockholm and Uppsala county further on.

⁴³ Björn Helmfrid 1949, p. 79 ff.

that a single figure has had to reflect all residents' and all types of grain's stook yield."⁴⁴ Few examples of such comprehensive standardisation have however been observed within the project's areas of investigation. It should however be noted that tithes were harvest-dependent even in areas with standardised stook yields: the number of stooks continued to vary with the yearly growth.⁴⁵ In summary, we have decided finally to allow these sources of miscalculation to be compensated for with a ten-percent supplement when estimating the harvest based on tithes. (This supplement lies approximately in the middle between Björn Helmfrid's and Jan Lindegren's assumed underestimations according to the above).

In principle, the *tithes-bound* harvest is obtained by multiplication of preserved Crown tithes sums by, as a rule, 15 (Crown tithes corresponded normally to 2/3 of the total tithes or 1/15 of the harvest, obtained as $2/3 \cdot 1/10 = 1/15$). In a parish where all the farms gave tithes, the harvest estimation is thus almost complete. All that remains is to compensate for probable underestimations when counting stooks and when test threshing, which has consequently been set at 10 % in this project. Where the crown here and there kept less than 2/3, this must be taken into consideration.

So on to the tithes-exempt farms. At harvest estimations, assessments must be made of these farms' harvest. That can be done most suitably by counting out virtual tithes for these farms according to their tax assessment unit, mostly "mantal". If the paying peasant farms in a parish consisted of e.g. 20 mantals of land and the exempt farms of 2, the result is total tithes (real + virtual) by multiplication of the real tithes from the paying farms by $((20+2)/20)$. The implied assumption is that the mantal was strongly correlated to the farm's resources, which it was, at least locally, with all certainty. The mantals emerge sometimes from the tithes lists themselves, but as a rule they must be sought elsewhere, in among other sources like the Crown's cadastres and in other county accounts. For a small number of royal castles, royal farms and manors that initially were not assigned any mantal, the mantal that they in later times came to be taxed for can be used for the sake of simplicity. In many cases, we have used the calculations that were made for 1690 in an earlier project.⁴⁶

As we have seen, the crown handed over parts of its tithes to other recipients. When such recipients' accounts have been used for harvest estimates in the project, we must be aware that some recipients were only allowed to keep their tithes after certain "customary reductions". These reductions are the following⁴⁷:

- Wine- and building grain, the local church's retained part of the tithes (were for a long time adjustable and harvest-dependent in the former Danish-Norwegian areas to the extent that they were not leased out, "statt", in "Old Sweden" it was as a rule fixed for long periods).
- Cathedral barrel, two from each tithe barn.
- Bible printing barrel, one from each tithe barn. It had ceased in 1637, but was taken up again in 1674 and then allotted to the Antiques College that had been established in Uppsala.
- Provost barrel, one barrel from each tithe barn.
- Parsons' remuneration varied according to what the 1500s reformation signified in the form of withdrawn church peasant farms belonging to the parishes' parsons' table. This kind of remuneration was unchangeable but sometimes more temporary, enjoyed if the vicarage was situated near a heavily trafficked road etc.
- "Dammspann", half a barrel from every parent church's tithe barn, a quarter from other parishes (ceased usually when fixed tithes had been introduced).

The reductions mentioned were to a great degree unchanged over time on the parish-level. For the Orphanage and Soldiers' home barrels, see above.

⁴⁴ Björn Helmfrid 1949, p. 79 ff., 101.

⁴⁵ Leijonhufvud 2001, p. 76. The proverb "rye hires farmhands right up to midsummer" means that the amount of straws, and thereby the number of stookes, varied according to the annual growth. Linnarsson 1948, p. 121.

⁴⁶ Palm 2012.

⁴⁷ Lars Gustaf Linde 1887, p. 303 f.

Estimates?

For parishes that completely lack tithes information for one year or other, we have not made any attempt at estimates. The files in the database in principle only take up the actual figures to be found there. Where parish gaps have been found, index calculations on the district or bailiwick level have been used to fill them. In most cases therefore we have set the harvest year 1665 = index 100.

How this calculation has been carried out is shown by the following imaginary examples:

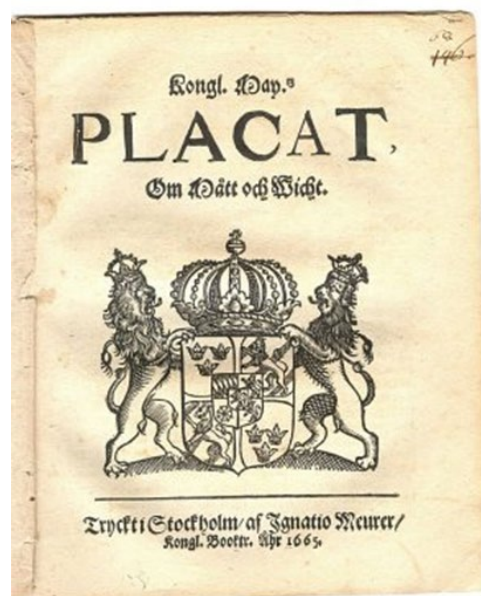
1665	Tithes	Index
Parish A	10	100
Parish B	10	100
Parish C	15	100
Parish D	5	100
Total tithes	40	100
1675	Tithes	Index
Parish A	15	15/10*100=150
Parish B	10	10/10*100=100
Parish C	20	20/15*100=133,33
Parish D	No info	
Estimated total tithes	51.11	Received as ((150+100+133,33)/3)*(total tithes 1665)

As can be seen, the parishes produced tithes of varying size. The index presents simple calculations of the average. Extreme values for small parishes can thereby sometimes give unrepresentative indices. One could, if the ordering of sizes may be taken to have been stable, choose to weight the index. Perhaps using median values would also have been preferable. For practical reasons, we have however refrained from doing this. In the index diagrams we have made, information has also been included on how many parishes a certain year's calculations use as its base. The fewer parishes, the more uncertain the calculations.

One estimate of the harvests from the Orphanage or Soldiers' home barrels where the 1664 rule was applied presumes an estimate of the total tithes based on these institutions' accounts. Such an estimate is as a rule made through simple multiplication of the number of barrels stipulated there by 40 (as well as the supplement for exempt farms according to the above). When the Orphanage barrel in certain areas in Uppland and Södermanland at the beginning of the period investigated has, against the rules, been estimated based on the net tithes *after customary reductions*, these have been seen in our project as largely stable in every parish. Their size has then been taken from a suitable source and a year close to the years when the 40-part barrels have been used. The estimates of the total bailiwick tithes have then been made using the following formula:

$$40 * (((\text{customary reductions} - \text{the stipulated Orphanage barrel}) / 40) + \text{the stipulated Orphanage barrel})$$

In order to assess the realism in the harvest estimates from Soldiers' homes' and Orphanages' accounts, randomly sampled bailiwick comparisons have been made between information on the Crown tithes in the tithes extracts and the tithes that can be estimated from the 40th parts. Mostly the differences are reasonably small. Sometimes they do deviate however. Most of the deviations can be explained by various roundings-off. The smallest unit in the two kinds of accounts is often decimals of kappes, i.e. 320th parts of the barrel. A 320th part is the equivalent of about a half litre of grain. When the tithes are estimated from 40th-part barrels, possible mistakes are multiplied by 40. If one is later to estimate the harvest, normally by multiplication of the Crown tithes by 15, this means thus that possible mistakes are multiplied by 600. When, as in the case of Öland district in 1686, thoroughness in the Orphanage barrel's number of kappes is as great as 36,299/72,000 of a kappe, then the mistakes will despite all be very tiny. Other deviations can be explained by the irregular calculation of the 40th part in some bailiwicks (see above). Anyhow, the harvest estimates from the Soldiers' home and Orphanage barrels carry some uncertainty that is hard to measure in the statistical series produced from the material.



Our hope is after all this to have obtained homogenous tithes series from the material mentioned at least at the bailiwick and district levels for counties with large gaps in their other tithes material.

The barrel

Before 1665 it is sometimes unclear how much a grain barrel held. A new barrel in 1638 was probably somewhat smaller than the nearest previous and later barrels (142.9 litres).⁴⁹ Via proclamations on measurements and weight in 1665, the levelled-off barrel's (see below) volume was adjusted to 146.6 litres, a volume that was later to apply until the introduction of the decimal system around 1860. The barrel could be divided into 8 Swedish firkins, 2 spansns, 4 half-spansns, 56 Swedish pottles or 32 (almost) kappes. In the areas that counted in Swedish measure "skäppa", uncertainty still prevailed about the volume of these. There might be 4, 5, 6 or 8 skäppas to a barrel. Skäppa-counting only occurred in the provinces Bohuslän, Halland, Västergötland, Småland, Värmland and Öland in the areas investigated in the project. Concerning these skäppa measurements, see these particular county chapters further on.

Excess measure – the "råga"

The tithes amount farmers were to deliver to the parish tithe barn depended not only on the barrel's volume but also on the method of measuring. According to the 1638 decision the aim of the "råga" was to compensate for the "disappearance". What was that? Björn Helmfrid showed, as we have seen, that roundings-off downwards etc. when counting stooks and test threshing mean that the tithes lists' actual quantities needed to be increased by almost 5 % in order to correspond to the tithes' correct proportion of the harvest. It is probably this that is meant by "disappearance". The 1638 excess measure corresponded to not quite 6 % of the

⁴⁹ Morell 1988, s. 38.

tithes.⁵⁰ Lindegren counted with a considerably higher underestimation, on average 15.6 %. Compare above the project's suggested supplement of 10 % in this context.

When measuring grains, there was a difference between *levelled-off* and *excess* or *full* measures. The former meant that the measuring vessel was filled then levelled off by drawing a stick across the lip of the vessel. The latter meant that the vessel was filled with as much as it could contain without any excess falling off.

At the Parliament meeting in 1638, the peasant farmers complained that large excesses were measured when tithes were gathered, but that levelled-off measures were used at the bailiff's onward deliveries "not knowing whether the same excess measures do any good for the crown or not".⁵¹ Now it was decided that the tithes should be delivered with unshaken, unpacked and levelled-off measures but with an excess of 2 "Upplandz fat" corresponding to "Finnish kappes". When certain measures were changed through the 1665 regulation, the two kappes were retained, **equalling 2/32 or 0.0625 barrel or 9.16 L.**⁵²

According to a regulation from 1733, the method of measurement was changed. The tithes grain was now to be measured not only levelled off but also shovelled and shaken. By shovelling was meant in this case that the grain was packed by throwing it down hard with a shovel, and the shaking of the vessel meant further packing and thus more grain per vessel volume. The amount of grain the farmer was compelled to deliver was thereby increased.⁵³ Two kappes in excess still had to be added. This measurement method was repealed after four years on account of great dissatisfaction among the peasantry.⁵⁴ That means that some uncertainty now exists about a barrel's contents excluding the excess measures for the period 1733-1738. It may have contained 3-7 % more grain than the years around that period.⁵⁵ At the turn of the year in 1736/1737, a law was made that returned to the loose and levelled-off measurement method with the two supplementary kappes. Thus they were back with the same volume as before 1733. In 1739 the kappe measure was doubled to four kappes per barrel. Now 36 kappes were thus counted per barrel. The excess measure thus corresponded to about 12.5 %. The 36 kappes measurement came to be called the "fixed measure" and the barrel the "fixed barrel". This was changed only when the decimal system was introduced in 1855-1863. The supplements were always counted in levelled-off measures.

How was the measuring in the tithe barns carried out? According to the statutes, the measuring vessels were only allowed to contain the standardised, officially fixed volumes. Larger so-called "uppbördstunnor", collecting barrels, that included the excess measures were forbidden as early as the during Gustav II Adolf's government (Gustav was king 1611-1632).⁵⁶ It has naturally been easier and perhaps more personally lucrative for the bailiff and his people to measure in larger vessels than those approved. And the peasant farmers' complaints in 1638 imply that the prohibition was perhaps not always effective. The crown sharpened its order however and we saw e.g. above that the authorities as early as 1663 presumed that the tithe barns held a set of approved vessels of different volumes in order to be able to estimate the farmers' supplements in the form of excess measures according to the tithes lists, apart from the tithes. In 1739 the following was legislated that had probably applied already for a long time:

⁵⁰ Björn Helmfrid 1949, p. 97.

⁵¹ Björn Helmfrid 1949, p. 13. In connection with the 1638 tithes discussions, the rear admiral came with a reminder that in the time of Karl IX, king 1604-1611, an excess measure of two Swedish pottles per barrel had been decided, but that since the barrel had been made bigger (he does not specify any year ...), the excess measure was nonetheless exacted. According to Raam 1670 the year was 1604.

⁵² Emerges many times explicitly in the extracts, see e.g. the extract for Stegeborg county's bailiwick in 1669.

⁵³ When test measurements were undertaken in 1737 they showed that the differences between a loosely packed and a very heavily shaken and packed measurement could amount to a ¼ barrel. Falkman 1885, II, pp. 155-157.

⁵⁴ Jansson 1950 under "Kappe" and "Fast mål och fast tunna".

⁵⁵ Morell 1988, p. 44.

⁵⁶ Jansson 1950, p. 99.

“... all charges in kind, Tithes and privilege grain, in collection and delivery, ought either to be poured slowly out of the sack into the barrel, ... or be measured in such a way loosely, so that the measurer or he who carries out the measurement, stands by the barrel, and with a shovel, which is wielded by both hands, and pours the grain over the tip of the shovel blade into the barrel, at once as much as is on the shovel, closely over the barrel brim, not with any gesture, throwing, the shovel being lifted higher, or so that the barrel is bumped with a foot or the shovel; and when the barrel is thus full, it is brushed evenly off with a correct brushing plank, that should not be sharp-edged underneath, but somewhat rounded, and not broader on the other side than two inches. With smaller measures, the same procedure is applied”.⁵⁷

The temptation for the collectors to carry out simplifications has surely been great and the excess measures that we see in the accounts are sometimes possibly pure accounts products. A letter to the editor in a Jämtland newspaper in 1844 shows how the business could be conducted and complains that an

“... indeterminate measuring method is common at the annual Crown-Tithes collections here – **Without any levelling off,** the Barrel, after the Bailiff’s approval, shall be filled to a 1 to 2 inches’ rounding in the middle, and the smaller measuring vessels in proportion to that, under the idea that a generous over-measure is required as compensation for what can become a diminishment through tramping and shovelling at the measurement; the peasantry seems from this to have reason to ask the question: (if somebody were to answer it would be desirable;) is there any Ordinance that imposes upon the Tithes- or Revenue-giver to fill the measuring vessel with more than it actually accommodates under a lawful levelling-off ruler?”⁵⁸

In his study of tithes in Ståthöga in Östergötland, Björn Helmfrid puts the important question of how the excess measure affects our assessment of the tithes lists’ actual figures. According to Helmfrid, the answer is simple: The lists’ figures “intend to evaluate the farmer’s yearly harvest, measured with the locally prevalent levelled-off measurement”.⁵⁹ The excess measure or the “råga” compensated for an approximately equally large underestimation in the tithes estimates out in the parishes: If one consistently estimates tithes and “harvest figures” with excess instead of levelled-off measure one ought fully to compensate for the errors.⁶⁰

Barrel and excess measure from and including 1665

According to statute:	Barrel volume in litres:	Measuring method:	Barrel volume with topping in litres:
1665–1732	146.6	Levelled-off + 2 kappes	155.8
1733–1736	146.6	Levelled-off, shaken, shovelled + 2 kappes	C. 160-166
1737–1738	146.6	Levelled-off + 2 kappes	155.8
1739 – ∞	146.6	Levelled-off + 4 kappes	164.9

Source: Morell 1988, p. 41 ff.

We have aimed at homogenous statistics on tithes *without excess measure*, i.e. tithes in *levelled-off* barrels etc. In the source materials used in the project, it has therefore been important to control how excess measure has been treated when making excerpts. That is done first and foremost by investigating whether or not the tithes extract’s tithes figures

⁵⁷ Kongl. Maj:ts Förnyade Förordning Angående Måhl, Mått och Wigt, 29 maj 1739. Compare Instruction Kongl. May:tz nådige Instruction För Häradsfougerne wid deras Tiensterns och Embetens Förättningar. Gifwen Stockholm den 9 Octobris, Åhr 1688, III:2.

⁵⁸ Letter to the Editor, *Nytt Allvar och Skämt*, N:o 16, Thursdagen den 18 April 1844.

⁵⁹ Björn Helmfrid 1949, p. 12 f.

⁶⁰ Björn Helmfrid 1949, p. 101.

match levelled-off barrels according to the statutes. If the number of barrels in the extract and lists match, then one can without problem use the more easily worked-on extract's barrels instead of the lists'. That does not prevent the extract's barrels from in actual fact being in full measure, which they have been when the peasant farmers at collection at the tithe barn had been forced to add excess measure to the tithes lists' specified levelled-off tithes. The number of barrels with excess measure in the extract was thus numerically as many as the lists' levelled-off. In many cases the excess measures are also specified as separate entities in the extract. In the county chapters that follow, we discuss how the excess measures were treated in each respective region's source material.

On the columns in the databases

Certain standardisations have been made in this project:

- Anmärkningar = Remarks: sporadically stated comments on the databases' figures
- Decibarrels = The sources' figures in fractions converted to decimals and with consideration taken to locally varying smaller measurements
- Index = tithes or harvest figures converted to index with 1665 as base year
- Källor = Sources = information on from which archive, which series and volumes or from which literature the databases' information has been taken
- Län 1913 = the county division used in *Emigrationsutredningen, Bilaga V, Bygdestatistik*. 1910
- Standardhärad = the district division used in Palm 2000, as a rule each respective parish's district appurtenance during the middle of the 18th century

Otherwise, it is apparent which variables are included in the databases for the various counties and areas in the following chapters.

Bohuslän

Lennart Andersson Palm

Administrative divisions

Bohuslän – the old Norwegian province Viken – was annexed from Denmark-Norway through the peace treaty in Roskilde in 1658. During the first Swedish period the province was led by a governor with Bohus fortress outside the city of Kungälv as his residence. In connection with the Scania war (1676-1679) general governorship was established for the Scania provinces, **which for a time included Bohuslän**. After the war ended, Bohuslän province was included in a new county – Bohus county. The old western-Swedish districts of Askim, Sävedal and Eastern Hising, the latter also called “Swedish Hisingen”, were transferred from and including 1680 from Älvsborg to what soon became Göteborgs och Bohus county, an ordinary civil Swedish county. Vättle district and half of Väne district (Vassända-Naglun and Väne-Ryr parishes) as well as Dalsland belonged temporarily to the county in 1680 (belonged otherwise to Älvsborg county).

In 1673, the baronship Bohuslän also called Kastell-ladugården, also near Kungälv, was established. It was ceded to the crown in 1681.⁶¹

Rödbo parish is sometimes called Kungälv’s country congregation, and Bäve sometimes Uddevalla’s. Possible tithes from the former chapel congregations Lysekil and Mollösund are included in the database among their main congregations’ i.e. Lyse’s and Morlanda’s tithes respectively. Tose parish tithes were included in due course in Svarteborg.

In the database, the old western-Swedish districts’ tithes information has been excluded on account of its uncertainty (see under chapter on Västergötland). We are thus concerned only with the *province* under the heading Bohuslän.

Source materials

The tithes information used for statistics on harvest estimates has for some years been taken from a transcript of the tithes-setting list for 1694 in the National Archives’ regional archive in Gothenburg, for other years in the unusually well preserved county accounts at the central National Archives in Stockholm.⁶²

The war in 1675-1679 lead to a degree of destruction of tithes information: e.g. Western Hising’s lists for 1677 are said to have been destroyed during the Norwegian siege of Bohus and for the Inland districts during the battles round the town of Uddevalla. Further source losses occurred when Sönnerviken district’s tithes inspector defected to the enemy side as early as 1675.

The parish churches in Bohuslän kept a third of the tithes, as did among others Scania and Halland. This part of the tithes is accounted for in numbers of church accounts from this region. These have been very valuable tithes sources for the war period 1675-1679 when the Swedish crown lost control over extensive areas of the province and the county accounts do

⁶¹ Bro and Lyse parishes are included in the present databas under Stångenäs skeppsreda unlike in the previous agrarian project’s databases (*Palms och Martin Lindes Sverige 1570-1810 etc.*).

⁶² Göteborgs och Bohus läns landskontors arkiv, GIIle:1, GLA; Länsräkenskaper Göteborgs och Bohus län, RA. In the former case for work-saving reasons – minor differences between original information sources may possibly have occurred, however probably insignificant in our context. In 1690 for some reason the crown accounts take up both the Crown and parish church tithes, which is why the tithes for this year have been halved in the database to simplify comparisons with other years’ Crown tithes.

not show the tithes in question in the occupied regions.⁶³ When such information has been used, this is shown in the database's source column.

Possible clergy private accounts (see below concerning Halland) have not been searched for in this project, even though they might exist occasionally. Other material that may have been preserved in archives from the various recipients to whom the crown has allotted the county's tithes, such as Marstrand's town church and school, Gothenburg's senior high school, Göteborgs gymnasium, and others, has also been left out. The accounts preserved in Danish and Norwegian archives for the parts of the province occupied in 1676-1679 also belong to that which has not been investigated.⁶⁴

Bohuslän paid the so-called Soldiers' home barrel to Vadstena Soldiers' home from and including 1687 at least, but this information has not needed to be used.

Measuring vessels' volume, measuring barrel

In the Göteborgs och Bohus county governor's PM concerning the 1694 tithes setting (see below) it is said that the barrel was as large as in the rest of the country; unshaken and without excess measure, it contained 146.6 litres.

Confusion prevailed however even after the 1665 standardisation as far as the barrels under-divisions in western Sweden were concerned, varying sizes of the "skäppa". The PM gives explicit orders as to what applied at the time of setting tithes. Different sizes of skäppas existed at that time in different parts of the county depending on historical conditions: four skäppas per barrel were counted in the former Norwegian areas and five skäppas per barrel in the county's old Swedish districts "like in Älvsborg county".⁶⁵ In the material on the tithes setting it is noted that on the big islands Tjörn och Orust (like in the Västgöta districts), all tithes were counted exclusively in skäppas, but in all other areas in both barrels and skäppas.

In 1668, for Norrviken's bailiwick it was said that tithes "are estimated at 6 skäppas to the barrel according to the recently established measure in that place", but during the following also in *sättingar*; one sätting corresponding to 1/12 barrel.⁶⁶ The same thing applied for a time in Sörbygden bailiwick. Otherwise in the crown's accounts in Bohuslän they used skäppas of which there were four to a barrel. Some confusion remains, for in 1683 it is clear that they counted 6 skäppas to a barrel in Sönnerviken, according to the PM in 1694, implicitly 4. How the changes happened has not been considered worth investigating more closely. The extract's main sum is of course in barrels. Only for Orust's and Tjörn's bailiwick does the size of the skäppa have some significance for the tithes estimates since all tithes there are shown in skäppas, even in the list summaries. At least 1669 and onwards the tithes extracts on those islands indicate four skäppas to the barrel.

The barrel as measuring unit, measuring method, excess measures

The excess measures are always specified separately in the material we have gone through. The database only includes levelled-off barrels.

⁶³ Information about the parish churches' third of the tithes has been preserved for a number of parishes these years. The information seems as a rule to have been compiled in 1680 after the war. From the accounts we see that both the Swedish and Norwegian troops had taken away greater or smaller parts of the parish churches' tithes. In northern Bohuslän that was occupied for a long time, half of the tithes seem systematically to have been taken by the Norwegian troops.

⁶⁴ Included among Reviderede regnskaber, Midlertidigt Besatte Lande, 1651-1722, Rigsarkivet, Copenhagen.

⁶⁵ PM in Häradsskrivarens i Göteborg arkiv, volym EI:9, s. 5, GLA. Concerning barrels, skäppas etc. see also the project report *Sverige 1630. Åkerbruk, boskapsskötsel, befolkning*.

⁶⁶ Framme 1999, p. 348.

The tithes system

For the former Norwegian Bohuslän, Crown tithes were only 1/3 of the tithes; the remaining 2/3 went to the minister and the parish church.⁶⁷ From an inquiry into the clergy's and churches' incomes in the county accounts office, it emerges that the ministers, like in many places in the former Danish-Norwegian areas collected their tithes directly "by the sheaf" in the fields after the grain had dried.⁶⁸ From many parish church accounts it emerges that the churches' tithes, when they were harvest-dependent, were taxed according to yearly growth and are accounted for "by the skäppa", i.e. as threshed grain. Comparisons show that the three thirds were equal in size, which they were not always in other annexed areas (see under Jämtland further on).

In the tithes-setting material for the years 1685-1687 (1689) it is stated that the tithes in the tithes lists consulted were estimated according to "the old traditions and methods", "old traditions and customs" and similar, in the lists in 1691-1693 after tithes estimates and test threshing "according to the instructions and new methods". What the "old methods" meant more precisely is still unclear. The information is fragmentary:

In 1667, Västra Hising's lists were signed by the bailiff, the sheriff and the jurymen. In 1673 the lists were confirmed with "testimonial" by the district judge with all the court jurymen plus seven seals. In 1666, 1668, 1669, 1672, 1675, 1678, 1683, and 1684 it was the district court that approved the sealed tithes lists. The same applied at least in 1678 also to Inlands Södra district. In 1688 it is stated that the clergy and district jurymen had set up and signed the Västra Hising's lists.

In 1668, Norrviken's lists were signed by the minister. In Sotenäs and Norrviken, a tithes inspector set up and signed the lists in 1672. In Norrviken's bailiwick in 1674, tithes followed the ministers' and jurymens' signed and sealed lists.

Sönnerviken had a tithes inspector in 1675 (see above).

For Inlands' Fräkne, Torpe and Nordre districts, tithes lists from 1675 are signed of the ministers and provided with seals for six persons with peasant names. In 1674, the list was provided with six seals.

In 1684, Orust's and Tjörn's tithes are accounted for according to the minister's lists.

One important question is if "the old tradition" included test threshing. At least in 1680 both stook counting and test threshing were used everywhere, but one piece of information from Inlands Södra district in 1673 may awaken doubt when it mentions that taxation was "... correct and according to the peasantry's own statements, and therefore we verify as testimony ...". In 1674, Inlands' tithes were said to be "taxed according to the year's growth". Several parish accounts state explicitly that church tithes had been taxed according to the year's growth, which speaks for test threshing. In 1678, the crown accounts for Håлта parish in Inland state that tithes have been adapted to "the peasantry's impoverished condition and the year's crops", and the lists were once again provided with six signatures. In 1682, Inland Torpe district's list communicates that tithes are "according to God's blessing and the year's harvest ... so correctly stated, as we before God and His Royal Majesty safely will and can answer", the list once again with six seals. In 1689, in the list for Krokstad is written: "... to the most careful degree investigated, and after human efforts, as well as our best conscience, correctly and rightly accounting for the crops that God has graciously decided to bless the country with". For Naverstad parish in Norrviken district the list ends thus in 1673 "... at a

⁶⁷ According to the county governor's PM in 1694, the crown only received a third of the tithes in the *province* of Bohuslän "according to ancient custom", and the church and the minister each received their third. In "the districts obedient to Gothenburg (Askim, Sävedal and Östra Hising districts) the (tithes allocation) is similar in constitution to Västergötland province and Älvsborg county, which as far as after allocation ... has been observed", i.e. that two thirds went to the crown and the minister retained one.

⁶⁸ See Göteborgs och Bohus läns landskontor, G IX ab, "prästverket", Prästerskapets och kyrkornas inkomster, 1685, 1696, GLA.

general meeting after God's blessing and the year's crops as stated by the peasantry ... as which we have most carefully been able to test and investigate ...".

As will be seen below, the peasantry complained around 1690 about the cumbersome tithes counting that had been introduced via various decrees after the province's takeover by Sweden. Against this background and the above glimpses, it seems that Bohuslän under our period of investigation had the same system as old Sweden, with ever more thorough controls through test threshing, the minister's participation in taxation, the "sixmen" and oath-swearing in court. In at least certain parts of Bohuslän, the crown had at times sharpened its control via appointed so-called tithes inspectors.

In Scania and Halland it was common that both crown and parish tithes were leased, often by a nobleman, sometimes by parish peasant farmers for a fixed charge. The lease could be for a long time, sometimes the lease-holder's lifetime. Such things also happened in Bohuslän, especially before 1675. The parish churches' tithes could also be leased. In Bohuslän's crown accounts not only its lease is shown but also the tithes the lease-holder took out, probably as a control on the part of the crown that the lease had not been set too low.

Öckerö island parish paid its tithes in money. In 1675, it was written that the island had "fairly little or almost no agriculture ... (and carried out its) industry by fishing and other things from the sea". In 1694 the island's tithes were estimated at 4 barrels, 2.5 skäppas.⁶⁹

Fixed tithes

Fixed tithes were introduced in the country from and 1694. There is particularly good reason to give a closer account of this tithes setting since it also discusses the traditional tithing methods and methods used to set fixed tithes in other counties and their suitability for Bohuslän in particular. It started like this:

Around 1690, complaints came in from the peasantry in Bohuslän to the authorities over the inconveniences that had cropped up through the cumbersome tithes counting that had been introduced and regulated in new instructions since the county became Swedish. People wanted to have tithes now with the same unchangeable sum year by year. The Kammarkollegiet decided on 19/8 1691 on fixed tithes setting in the whole county. On 21/2 1694, it finally sent out the order to the county governor, Johan Benedict von Schönleben, to implement the tithes setting for the crown's "greater security" and the peasantry's "solace and relief for the trouble and difficulties that the estimate and test threshing have been said to bring with them". Hereafter a large-scale apparatus was set going. The question that immediately arose was how to act in reality when setting fixed tithes? Which methods were available? How they reasoned is apparent from the correspondence about the Bohuslän tithes setting.⁷⁰

On 15/8 1692, the Kammarkollegiet had various methods that had been used when setting fixed tithes in other parts of Sweden. Chamber councillor Lars Eldstjerna's method for Jönköping and Kronoberg counties in 1686 had meant that tithes were linked to acreage and type of soil. In those two counties trials had been made under the supervision of ministers and bailiffs. The Kammarkollegiet also stated that almost the same method had been used previously by commissioner "Hellesten" (probably Hillethan) for the provinces Scania, Halland and Blekinge. This man had after acquiring information on the "seed for sowing ... calculated a growth of every grain kernel and then from that proportioned the crown's amount of the tithes". The commissioner had in other words used the yield ratios of grains as his starting point.

⁶⁹ Länsräkenskaper Göteborgs och Bohus län, olika år, RA; Göteborgs och Bohus läns landskontors arkiv, GIIIc:1, GLA.

⁷⁰ When not otherwise referenced the following information is taken from Handlingar kring tiondesättningen, Häradsskrivarens i Göteborg fögderi arkiv, volym E I:9, GLA.

The Bohuslän county governor suggested in the correspondence with the Kammarkollegiet another method for his county: That several previous years' tithes should be added together and an average calculated as guidance. The Kammarkollegiet did not agree but recommended now instead a method that had been used at a tithes setting in Östergötland county and where the setters had considered the information from the peasant farmers themselves about their seed for sowing as well as the results of the professional land-surveying investigations where such had been possible to carry out.

On 18/10 1692 Schönleben objected however that the Östergötland method did not suit Bohuslän on account of differences in soil, nature and fertility. As a rule, according to the county governor, there were for Göteborg and Bohus county's part hardly any land-surveying documents to start with. This was especially the case for farms owned by the church or the clergy. The acreage of the county's farms was therefore as a rule unknown to the authorities. Schönleben proposed instead a simpler investigation of the seed for sowing and a comparison between the tithes from "The most bounteous years" according to older taxation methods and some years when tithes estimates with test threshing had been used in the taxation, "seeing which brings in most", and thereafter hearing which offers the peasant farmers might be willing to make.

On 21/2 1694, the Kammarkollegiet finally accepted a special method for Göteborg and Bohus county, this county having a "very weak and small acreage consisting of single crop cultivation". This is what this method consisted of: In the limited areas where "there have been proper land surveys and taxations" it should be possible to use this information as a starting point on soil type and seed for sowing, but where such were missing the tithes-setting committee should first allow the farmers to tell them about the conditions on their farms. After that, the committee, Crown officials and clergy would make their assessment. What the officials and clergy "of whom the latter's own interest is here affected", found to be a fair charge was to be given great importance. If the farmers and the others arrived at different assessments of the seed for sowing and soil type, then the commission would take the information that it found "most correct". The commission brought with it several years' information for each farm about how much tithes they had given after test threshing and stook counting in 1691, 1692, 1693 (i.e. after they for a time had used methods that the peasantry complained about), but also from some years when tithes had been estimated "according to old tradition in the county" for which they had selected the years 1685, 1686 and 1687.

On 11/5 1694, the county governor produced a PM that regulated the procedure. To his help he seems to have had the county accountants and county secretaries "from all over the county", the district judges, each within his own region, the provosts and ministers for their respective areas, the Crown bailiffs, the district scribes, the districts' jurymen and sheriffs (both "länsmän" and "fjärdingsmän") "in every bailiwick" as well as district jurymen, and the six elected parish representatives in each parish.

How the procedure was to be carried out was regulated in a special form from the county governor. After a summons from the pulpits, each parish with its commission was to assemble in the morning on the day of the procedure. There a number of warnings were to be read out which everyone was to listen to with "attentive ears". The tithes proclamation from 1638 was to be invoked. Threats were also to be conveyed: the peasantry must understand "that those who have most often made applications for mediations (tax reductions), who perhaps ought to persuade his royal majesty to allow a general land survey to be carried out, since then it could certainly be discerned if anyone were daring and deceitful enough as to try to keep secret a farm's quality, size, and other constitution...", these would now risk "punishment and dishonour". The same would strike neighbours who helped each other to hide the real conditions. The assembly was to be ended with prayer and further serviceable threats. The authorities obviously wanted, as so often in tithes contexts, to exploit the

religious charge the tithes tax had through its origin in the bible. Oath-swearing in court about having given the correct tithes had for a long time been ordered.

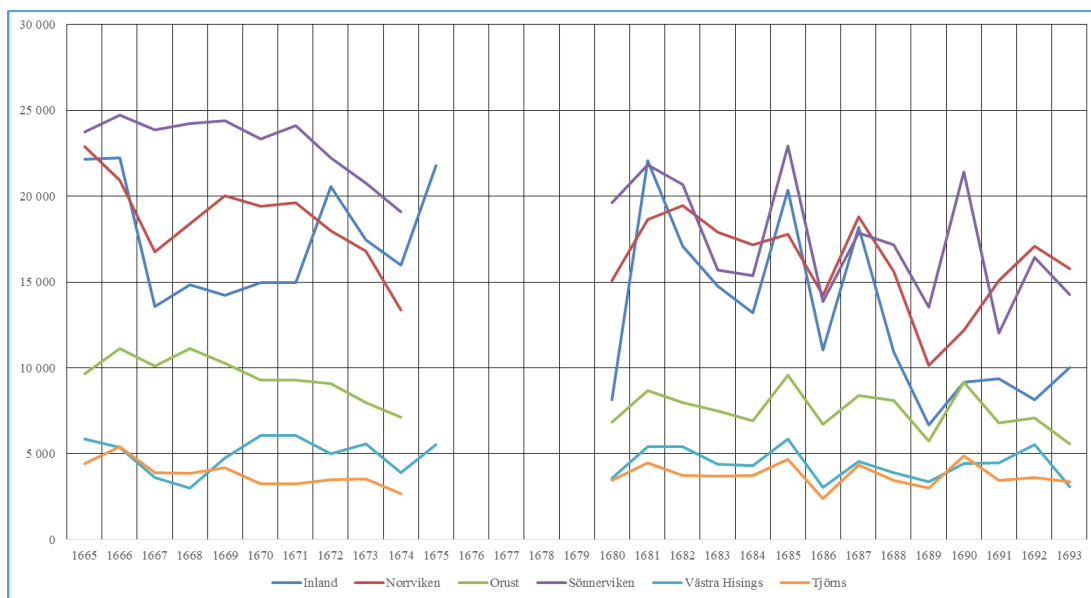
So now this idea was set in motion and protocols were established cadastre farm by cadastre farm over the entire county. Even the so-called “husmän”, the lodgers ‘and crofters’ fields were assessed and tithes applied. The seed for sowing of manors and vicarages was assessed just like that of the peasantry and fixed tithes were imposed on them too. For these latter these tithes were however just fictional since they were exempt from paying tithe on account of the privileges of their standing.

Different types of grain had different demands on acreage and gave different yields. The tithes setters in Göteborg and Bohus county in 1694 were forced to take notice of this when they were confronted with the information on the actual quantities of seed for sowing on this farm or that: it was a matter of creating uniformity: “And if they for this sake have passed by the winter seed and estimated the tithes after barley-land everywhere, then they have also on the other hand not introduced inferior grains like mixed seed and oats either, that in this way the one against the other can validate and the tithes on that basis can be set in the way most compatible with nature and character of the land itself”. This precision must mean that they tried everywhere to estimate the seed for sowing in barrels of which each corresponded to geometrical “tunnland” (1 tunnland = 1.22 acre). The exclusion of the clearly sparsely sown and unusual rye cultivation had had to be offset by the more densely sown oats.

Harvest estimates

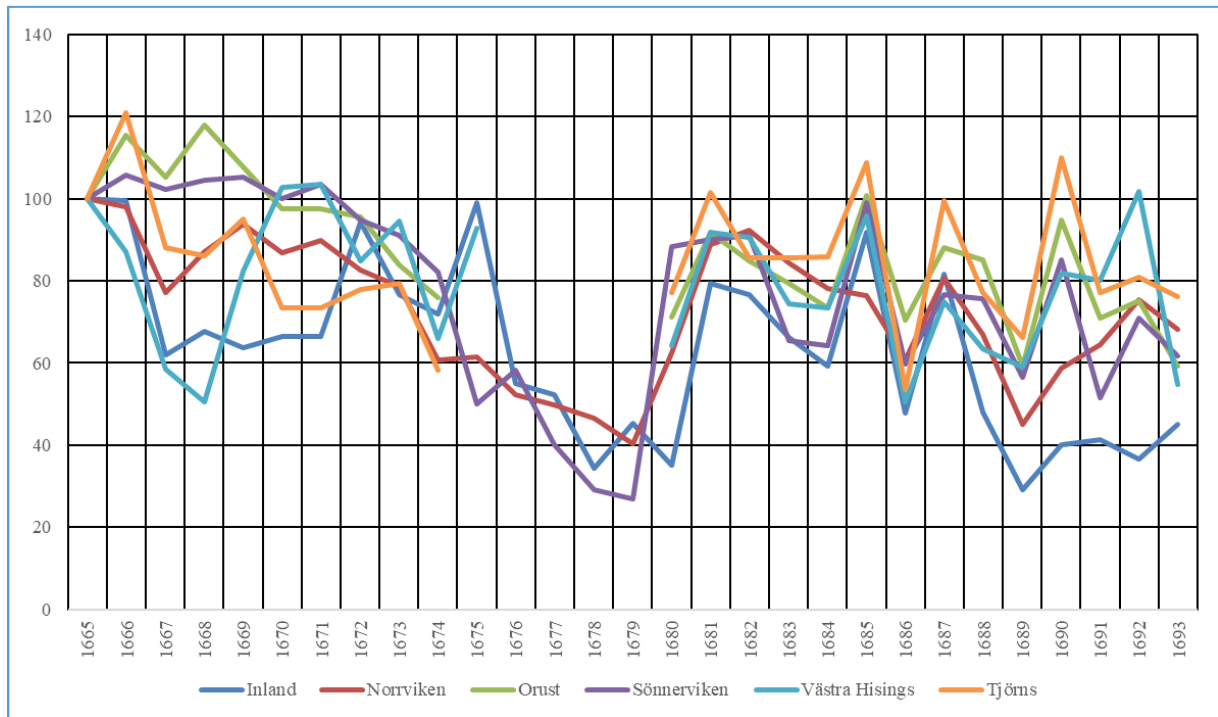
For the estimation of the harvests in Bohuslän, the Crown tithes information has been multiplied by 30 since the crown only kept a third of the entire tithes in that province. At the estimation of the tithes, a supplement must also be made for the tithes-exempt farms. In the compilation made at the tithes setting in 1694 it can easily be seen which farms had not had tithes imposed on them the years before 1694 (1685-1693). The tithes setters estimated fictional fixed tithes for these farms. These fictional tithes have been used in the calculations here. This means that the farms exempt from tithes are assumed to have had the same harvest during our whole investigation period as they were assessed as having in 1694. This procedure means naturally a certain evening out of the harvest figures in the database. The significance of this simplification should however not be exaggerated – the tithes exempt farms stood for only about 4 % of the county’s entire imposed tithes. Finally, a supplement of 10 % has been made to compensate for the underestimations due among other things to roundings-off downwards in tithes taxation (see the report’s introductory chapter). Beans and peas are excluded from the harvest estimations.

Estimated harvest development in Bohuslän bailiwicks 1665-1693 (barrels of reduced grain)



The following diagram shows the development in index form, including the index from bailiwicks with incomplete information, and information then based mainly on parish church accounts.

Estimated harvests in Bohuslän bailiwicks 1665-1693 (Index 1665 = 100)



Crises

What was otherwise called the Scania war 1675–1679 is called in Bohuslän the Gyldenløve-feud. The war meant that extensive areas of the province were occupied by Norwegian troops, particularly the regions around Bohus fortress – Inland – were hard hit by battles, many parishes also became the objects of requisitions by both the warring sides. A notice in the accounts from Inlands Fräkne district are eloquent, where low tithes in 1675 are explained by the fact that despite “the greatest possible diligence in this time of war ... evenso much (is) wasteland and unsown here in this country this year”.⁷¹ What the Swedes gathered in during the war from the areas they held must have been much less than the normal tithes: in 1679 it is said that for Västra Hising district what was accounted for “only” was what had been handed in to a storehouse at Bohus (a small sum).

For Norrviken bailiwick (Kville parish, Tanum, Vätte and Bullaren districts) in the description of the 1694 tithes setting, the year 1685 was a year with abundant growth, 1686 “worse” and 1689 as a year with “minimal” yearly growth.

⁷¹ Tithes list this year, RA.

Estimated harvests in Bohuslän province and its bailiwicks 1665-1693 (index 1665 = 100)

Year	Inland	Norrsviken	Orust	Sönnerviken	Västra Hisings	Tjörns	The province
1665	100	100	100	100	100	100	100
1666	100	98	116	106	87	121	103
1667	62	77	105	102	58	88	82
1668	68	87	118	105	50	86	87
1669	64	94	108	105	82	95	89
1670	67	87	97	100	103	73	87
1671	66	90	97	103	103	73	88
1672	94	83	95	95	85	78	91
1673	77	79	84	91	95	79	84
1674	72	61	76	82	66	58	72
1675	99	61		50	93		84
1676	55	52		58			54
1677	52	50		40			46
1678	34	47		29	84		43
1679	45	40		27			40
1680	35	63	71	88	64	77	63
1681	79	89	92	90	92	102	88
1682	77	92	85	91	91	86	86
1683	66	84	79	66	74	86	72
1684	59	78	73	64	73	86	68
1685	92	76	101	99	96	109	93
1686	48	61	70	60	51	54	57
1687	82	81	88	77	75	100	81
1688	48	67	85	76	63	77	66
1689	29	45	59	56	59	66	48
1690	40	59	95	85	82	110	69
1691	41	64	71	52	80	77	56
1692	37	75	75	71	102	81	65
1693	45	68	59	62	55	76	58

Variables in the database "Bohuslän"

Datafile "Grunduppgifter"

År = Year

Landskap = province

Län 1913 = county 1913

Härad = district

Fögderi = bailiwick

Socken A = parish

Socken B = parish where Tose parish listed under Svarteborg parish

Vetetionde i decitunnor = Wheat tithes in decibarrels

Rågtionde i decitunnor = Rye tithes in decibarrels

Korntionde i decitunnor = Barley tithes in decibarrels

Blandsädstionde i decitunnor = Mixed grain tithes in decibarrels

Havretionde i decitunnor = Oats tithes in decibarrels

Ospecificerat spannmålstionde i decitunnor = Unspecified grain tithes in decibarrels

Böntionde i decitunnor = Bean tithes in decibarrels

Ärttionde i decitunnor = Pea tithes in decibarrels

Tiondet som oreducerad stråsäd = Tithes as unreduced straw grain

Stråsädstiondet omräknat i ren säd = Straw grain tithes converted to reduced grain

Index 1665 = 100

"Tiondeskörd" A = "Tithes harvest" A, designates all excerpted parish information

"Tiondeskörd" B = "Tithes harvest" B, designates only information for complete
bailiwicks' parishes

Index 1665 = 100

Källa = Source

Anmärkning till kyrkoräkenskaperna = Remarks on church accounts

Anmärkning till kronoräkenskaperna = Remarks on crown accounts

Key to sources

GLA = Göteborgs landsarkiv = regional National archives, Gothenburg

RA = Riksarkivet, Stockholm = central National archives, Stockholm

Göteborgs och Bohus läns landskontor, GIle:1, GLA

Kyrkoräkenskaperna, GLA = Parish accounts, GLA

Länsräkenskaper Göteborgs och Bohus län, RA

Halland

Erik Hallberg

Administrative divisions

This province was ceded by Denmark to Sweden as a pledge of 30 years to Sweden at the peace treaty at Brömsebro in 1645 and finally completely through the peace treaty at Roskilde in 1658. During the Danish period, Halland was divided into several smaller counties. After the Swedish takeover, the new province was governed at first by a military governor, but in 1658 the first civil county governor was appointed. A governor general was however appointed the same year as the superior highest military and civil leader for Halland, Scania, Blekinge and, initially, Bornholm, with residence in Malmö. This general governorship was abolished in 1669, after which Halland became an ordinary civil county under a county governor. In connection with the Scania war (1676–79) the general governorship was re-established. This regime continued after the end of the war when Göteborg and Bohus county was incorporated into the governorate at the same time as Blekinge was in 1680 transferred to Kalmar County. In 1693 Halland, as well as Göteborg and Bohus county, once again became civil counties. In 1716–19 the general governorship was re-introduced once more. In the province of Halland there were also count and baronet lands, which however are of no interest for this tithes investigation.⁷²

Source materials

Halland's crown accounts are comparatively well preserved for this period of investigation, particularly the county accounts copies in Lund's regional state archives. Apart from these accounts, there is a great deal of information about the clergy's part of the tithes, as a rule taken out "*i neken*" (Sw.), as sheaves in the field (see more below). Information about the parish churches' third has been preserved in the county's different church archives in the regional state archives, but the information on the church tithes has as a rule been of less interest for this current project since it was most often fixed, commonly leased out, *sw.* "statt", for long periods (cf. Scania). On some occasions, the church tithes were however variable and these records are then able to fill in gaps in the other material.

The tithe system

As in Scania, Halland's tithes were divided with a third each to the crown, the parish churches and the clergy. Even after Halland's transference to Sweden, the clergy had the right to take out their portion of the tithes directly in the fields after drying. Unlike the other two recipients of tithes, the clergy also did this to a significant extent – accounts over the clergy's tithes have thus been preserved from several periods and congregations.⁷³ Starting in 1693, the county transferred to variable tithes according to the control regulations that were valid in the rest of Sweden.

During our period of investigation before 1683, the crown's and the Halland parish churches' shares of the tithes were leased by noblemen, or others. This meant that the tithes

⁷² The shire of Lillienborg, and the baronies Lindeberg and Vinberg. Within the shire of Bogesund, mainly in Västergötland, some peasant farms in Halland were also included.

⁷³ For a number of parishes (see the database sources column) for as a rule three varying years per parish, (one good, one mediocre and one poor) in the transcripts of their private accounts left by the clergy in connection with the 1684 tithes setting, see Tiondekommissionens dokumentbok I och II, i Hallands läns landskontor, Handlingar rörande tionde, volym GIIIe:2 and 3, LLA; For Skrea parish for long periods in Hallands läns landskontor, Handlingar rörande tionde, volym GIIIe:1, LLA, ss. 9–40; and for Slöinge, Eftra, Årstad, Asige, Söndrum, Vapnö, Gällared and Gunnarp for 1693 in Hallands landskontors archives, vol. G X ad:1, LLA.

became fixed for long periods and did not reflect changes in the harvest year from year. A few exceptions have been observed in the church accounts when tithes had been levied according to the actual harvest between two lease periods.⁷⁴ The payment of the tithe was not stable during this period. Ränneslöv church accounts after “the hard war years” state that the peasantry had not been able to deliver any tithes apart from “the little” that the Crown granary in Halmstad reported and what the church’s servants had received “for their office”, probably compensation for their work in connection with the handling of tithes, while the church’s patron – in some parishes, an estate owner had so-called patronage rights over the church – had not received “even the scantiest”. This is followed by an account of tithes “to be paid” for the years 1676–79.

When harvest dependent tithes were introduced in 1693, test threshing became a precondition, among other things (see below).

Fixed tithes settings

In the years 1684–92 Halland had fixed crown and church tithes.⁷⁵ In the 1684 tithe assessment, the annual tithe assessment was carried out by the government’s general provisioner Gabriel Hillethan by word of mouth order from the King on 10 September 1683 to be carried out “in the same way as in Scania”.⁷⁶ Tithes were to be set according to seed for sowing and grain estimates. The peasantry was reluctant to provide information despite threats that surveyors had already been appointed and were ready to pursue the matter. According to the commission, the information given by the peasants was often too meagre. Some of the local trusted commissioners were also unwilling here and there to provide accurate data, even though they had taken the oath. The clergy had on the other hand been helpful, which was not surprising since they had a vested interest in high tithes. They often gave the commission access to their own tithe accounts. Crown officials were also asked for advice by the Commission. The tithe records provide information not only about the farmers but also about manors, vicarages, crofts and the like, as well as towns. As in Scania, the tithe committees included some assessment of the soil in the estimation of rye, barley or oats, which is why detailed information on this is preserved in the protocols.

Here and there in the tithe lists, it is clear which grain yields may have formed the basis for Hillethan's calculations in e.g. Hanhals, with 5 for barley, 4 for oats, etc. The grain yield of 4 is mentioned remarkably often. As in Skåne, however, it can be suspected that Hillethan and his men allowed fictitiously high yield figures to compensate for suspected underestimation of the seed. The taxation methods for the county assume a grain yield of 2 or at most 3, which corresponds well with information on grain yields at Värö vicarage during the last quarter-century of the 1600s (see below).⁷⁷

Hillethan's fixed tithe for Halland was obviously too high. The farmers’ great dissatisfaction speaks in favour of this. In 1692 the governor announced in a circular to bailiffs and district clerks that the farmers had ‘loudly lamented’ and complained that they had to pay the fixed tithe despite ‘the great crop failure that had occurred a few years ago’. They demanded that from now on they should instead pay tithes in sheaves, i.e. harvest-dependent tithes. The bailiffs were therefore ordered to prepare for such a transition, to inform the clergy, and to appoint those who would assess the grain in the field in ‘good time’ so that the peasants could have it harvested and stored without it ‘rotting away’. The district clerks, the clergy, and tax collectors were to discuss matters at their respective meetings at an early

⁷⁴ Ränneslöv, Tvååker, Tönnersjö.

⁷⁵ In the Stockholm Orphanage’s accounts over its 40-part of the tithes in Halland, the tithes for the whole period 1680–90 were fixed. Allmänna barnhuset, huvudböcker, SSA.

⁷⁶ Hallands läns landskontor GIII:c1, LLA

⁷⁷ For taxation methods for the county, see Palm 2012, p. 54.

stage and draw up tithe lists according to accepted methods, including sample threshing.⁷⁸ Dissatisfaction had previously forced general reductions in 1687 and in 1693 the harvest-related tithe was reintroduced. However, the discontent continued. In 1694 the fixed tithe was again applied in Laholm County (after the 1683 tariff), apparently because there was no sample threshing, and the following year in the whole county, as far as can be judged. From 1696, however, the variable tithe seems to have been reintroduced once more throughout the province. Hishult parish, which was divided between Halland and Skåne, had fixed tithes from 1698, as did all of Skåne. Fjäre härad seems to have had the right to pay tithes in money according to “*markegången*”, a certain price set by the authorities for certain goods and services. According to the extract, the farmers only used this right on one occasion, in 1726, and then only partially.

In 1749, fixed tithes were reintroduced in the province. The method of levying tithes seems to have been very simple: the tithes were set according to an average year. Varbergs län and Fjäre härad paid tithes that year according to the 1739 tithe book and Laholms and Halmstads län according to the 1742 tithe book. The extent to which this simple method became permanent has not been investigated further.

The barrel as unit of measurement, method of measurement, excess measures

Some documents from 1693 state that the 1638 Swedish regulation on excess measurements would apply when the variable tithe was henceforth collected. A compilation from the same year lists these separately.⁷⁹ Other extracts from the time of the variable tithe also list the parishes' tithes without excess measure (and the excess measure as a separate item after each parish's data. The tithe data in the database thus refer to barrels without the excess measure included.

Measuring vessels' volume, measuring barrel

At the transition to a variable tithe in 1693, it was decided that the Swedish standard measurements of 1665 would apply. In areas where the “*skäppa*” measure was used, the number of “*skäppas*” per barrel that had previously been used would continue to apply, but the standardised state barrel of 1665 would be introduced.⁸⁰ From the so-called tenth land book, as well as from the 1684 fixed tithe, and also from taxation methods for the province, it is clear that in Halland 6 “*skäppas*” per barrel were used.⁸¹ Between 1693 and 1737, tithes were thus reported in barrels, bushels (six per barrel in Halland), and Swedish pottles (“*kannor*”). The 1665 proclamation counts 56 Swedish pottles per barrel. However, the number of Swedish pottles in the Halland tithes material never *exceeds* the number 7, which is why 8 Swedish pottles per “*skäppa*” must have been counted (in other words 48 Swedish pottles per barrel). This applied right up until Swedish pottle-counting stopped in the 1730s and was replaced by counting in “*kappes*”. A local exception has been noted for Laholm County, which only records barrels and “*skäppas*” during 1693–1727 (except 1695 when Swedish pottles were also recorded).

In 1738 the tithes in Halland were counted in barrels, firkins (“*fjårdingar*”) and “*kappes*” in such a way that 1 barrel = 8 firkins = 32 “*kappes*” (the figures in this latter

⁷⁸ Letter 25 June 1692, Hallands läns landskontors arkiv, Verifikationsbok I, år 1693, volym EI:42, LLA, p. 801, f.

⁷⁹ Hallands läns landskontors arkiv, Verifikationsbok I, år 1693, volym EI:42, LLA, pp. 806f, 1051ff.

⁸⁰ Hallands läns landskontors arkiv, Verifikationsbok I, år 1693, volym EI:42, LLA, p. 1052f.

⁸¹ Hallands läns landskontors arkiv, Tiondejorbok, volym GIII:e 6, LLA. In the church records there are sometimes old statutes that count small bushels of 8 to the barrel (“eight bushels”), and the same in the clergy records for Förlanda. This has only had very marginal importance for my tithe compilations.

volume column have therefore never exceeded 4). The only exception is the county of Halmstad, which this year does not report firkins, but only barrels and “kappes”. From 1739 onwards, all of Halland reports only barrels and “kappes” and counts 32 “kappes” per barrel.⁸²

In the 1665–1683 “stub accounts” over the clergy’s tithes, which the tithes commission requested for its work on determining the fixed tithes, the clergy report their third in unharvested grain, in stacks and sheaves, in contrast to the peasant farmers who paid in threshed grain, in the “skäppa”. The reason is that the clergy, neither in their barns nor in their accounts, kept the threshing result of their tithe and the grain from the parsonage separate. As for the unit of measurement, the number of sheaves (“nekar”) in a stack (“trave”) never exceeds 23 in any of the tens of thousands of records I have reviewed. This means that the clergy at this time still counted according to an older Danish way of counting with 24 sheaves = 1 stack. The only known exceptions are for the parishes of Hasslöv, Våxtorp, Slöinge and Eftra.⁸³ I have not been able to decipher the collapsed heading word in the second column [the one usually for “nekar”] in the material for Hasslöv and Våxtorp. Possibly it says “kase” or “kast”. Since this unit never exceeded 11, it must have been 1/12 of a stack.⁸⁴

Sheaves were the tied grain straws that were put together for drying in the stacks. They probably correspond to the “bands” that appear in some of the sample-threshing material for Halland. The sheaves’ size has probably been variable between regions; the fact that the 1670s stub accounts from Fagered and Ullared report the sheaves as “forest farm sheaves” (“skogsboneeker”) is a strong indication of this. This has implications for harvest estimates for the period before the introduction of the variable tithe (see below).

Harvest estimates 1693–1748

For the main variable tithe period, harvest calculations can be made for Halland by multiplying the tithe (adding estimates for omitted manors and parsonages, etc.) by 30. The starting point has been the original (“*oförmedlade*”) mantal of land (“*mantalet*”) in the land registers of the oldest Swedish period, largely unchanged in the later part of the 17th century, as well as the additions that can be made for the mantal of land (“*mantalet*”) of manors and parsonages omitted from the land registers..⁸⁵ A ten per cent increase has also been added to compensate for rounding down when measuring the tenth etc. (see the introductory chapter of the report). The result is shown in the following diagram (the same can easily be done at county or district level using the database):

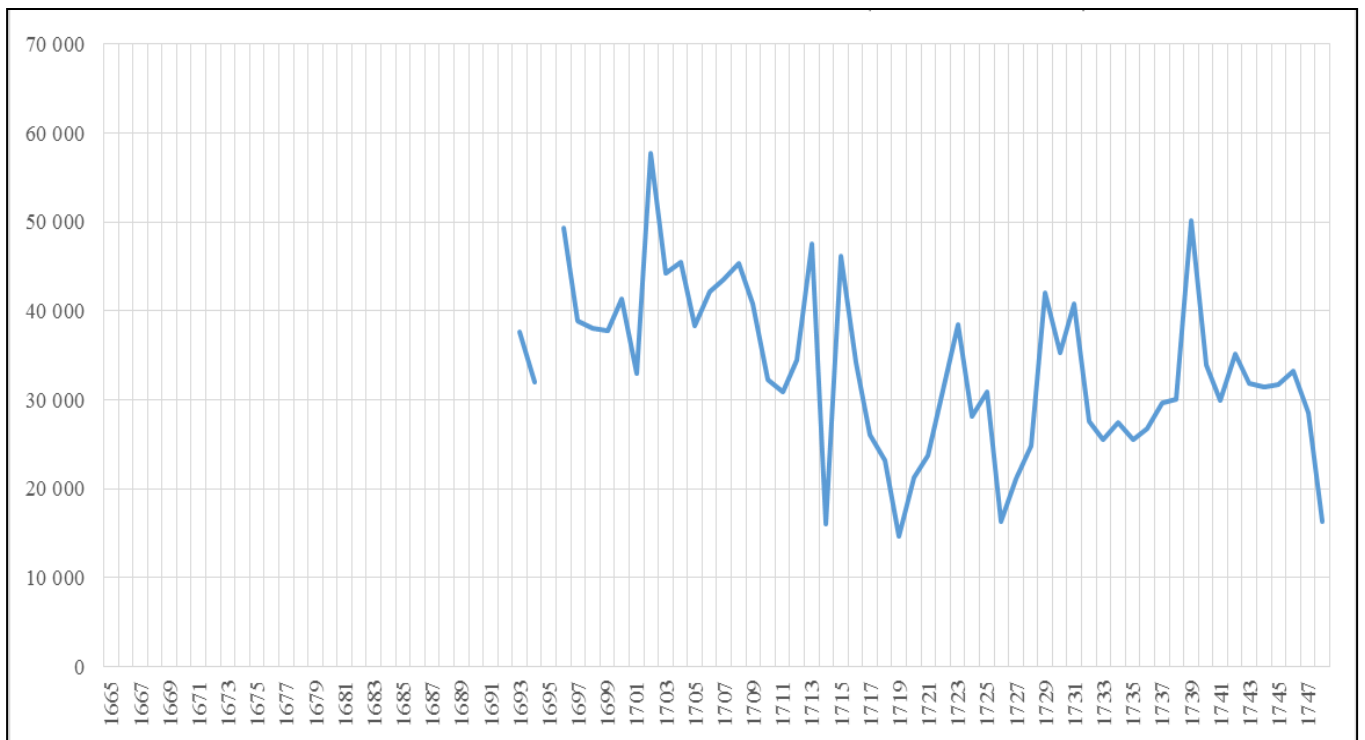
Estimated harvests in Halland 1665-1748 (barrels reduced grain)

⁸² The 1739 tithe list for Varberg bailiwick contains some unusual information. Some upward adjustments of the tithe list volumes have been made after “barn-throwing”. These increases (which do not occur in all parishes) are also accounted for. I have an excerpted special tithes list’s information, i.e. without addition for increases. The barn-throwing probably concerns a re-estimation of the tithes that the peasant farmers had handed in.

⁸³ Stenström 1945, p. 72, note 79. In a list of his tithes from 1693, the vicar of Slöinge and Eftra clearly counts 30 (the highest figures for sheaves in the list are 28 for rye, 29 for barley and 26 for oats), see the main text below. Stenström quotes Fischerström and Osbeck who, for 1761 and 1796 respectively, state 30 sheaves per stack in Halland. This is said to be a Swedish way of counting. In Skåne, on the other hand, 20 sheaves per stack applied at the end of the 17th century and in Denmark 24 sheaves per stack applied at the same time.

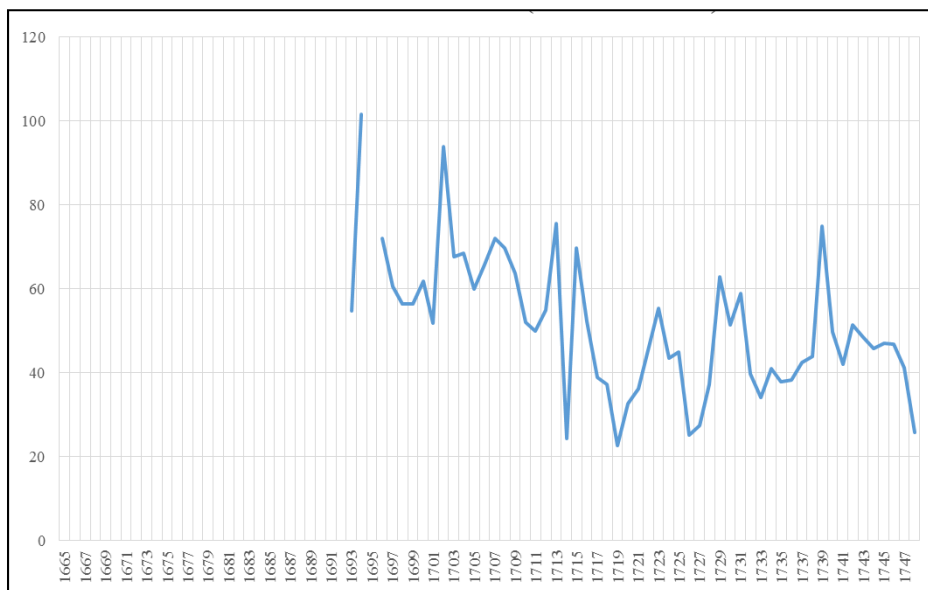
⁸⁴ SAOB states ”sv. dial, *kas, kasa, kase*, hop, hög, stack, liten torkad ruka m.m ... jfr ... *kasa*..., bringa tillsammans, som föreligger i bl. a.” substantivet KAST”. Compare the chapter on stooks etc. in the introductory chapter of this report.

⁸⁵ 2012, p. 51. The following younger manors are however included in the tithes sums: Skeppås (in Harplinge); Laholms ladugård (Laholm); Alslöf (Tönnersjö); Lundsgård (Tönnersjö); Stjernarp (Enslöv); Arlös or Alöse (Enslöv); Skeppsås (Steningen); Lindhofs ladugård (Träslöv) and Sjöslat (Veddige).



The previous diagram concerns volumes. This development is shown below in index form.

Halland's tithes 1693-1748 (index 1694=100)



1665–1692

The present-day area of Western Sweden region was characterised by relatively early fixed tithes, which is why the possibility of harvest estimations from the tithe is lacking for e.g. Älvsborg county. It is therefore of great interest to try to access the developments in Halland before adjustable tithes were introduced there in 1693. Unfortunately, this has proved difficult because of the extensive leasing system that dominated both the Crown's and the local churches' shares of the tithe. There are only a few occasional variable tithe records to draw on. Instead, for Halland, it is mainly the preserved clergy tithe material that is available.

As already mentioned, the clerical tithe records include unharvested grain stacks and sheaves. The number of harvested units has with great certainty been strongly correlated to the threshed grain. Tithes estimates all over the country were of course to a great degree based on so-called "skyl" or "rök" – collection of sheaves, a stook, set up in a certain way to dry in the field) estimates.

For Halland, the equivalent of the Uppsala areas stooks was the "neke" or "trave". The yields after threshed units varied, however, both between different farms, different regions, between different crops and between years, and, as the presence of "forest farm sheaves" shows, between different parishes. This makes it very difficult to make reliable conversions from stacks or sheaves to quantities of threshed grain. In order to at least get at the trends in the province before 1693, a database has been compiled of the clergy's reported stacks etc, and a probable conversion to sheaves. The latter unit has in that case been counted as the most uniform unit, despite "forest farm sheaves", since their size was in large part determined by how the sheaves could be practically tied.⁸⁶

The amount of the threshed grain the stacks and sheaves of the Halland clergy's tithe corresponded to can only be clarified in exceptional cases. An example is the parishes Slöinge and Eftra where the clergy stated how much grain their sheaves in 1693 yielded at the threshing:

⁸⁶The great amount of information has compelled the use of a selectively based investigation in which the average tithes from at least 30 randomly chosen tithes-givers have been used for estimations.

The following calculation can be made for the two parishes (30 sheaves per stack):

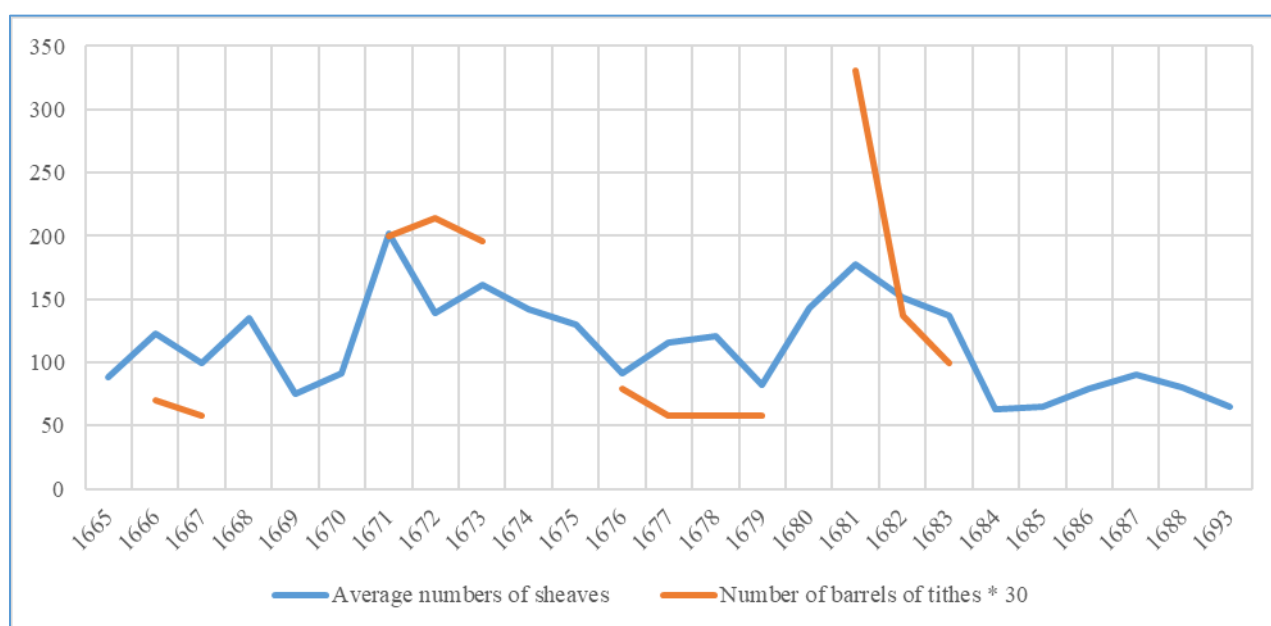
	Number of stacks and sheaves						Total sheaves
	Rye stacks	Rye sheaves	Barley stacks	Barley sheaves	Oats stacks	Oats sheaves	
	3.46	2 069.08	55.36	2 605.38		1 127.96	
All in sheaves		2 172.88		4 266.18		1 127.96	
							7 819.25
Total sheaves yielded 40 barrels 5 skäppas in threshed reduced grain levelled-off measure, thus 40.83 barrels							
Barrels per sheaf							0.005222

The total tithe in 1693 could thus be obtained by multiplying the clergy's tithes by three, the normal ratio for Scania. A comparison with the 1693 Crown tithe then reveals a further complication concerning the clergy tithe – for the two parishes, the Crown's share was reported to be slightly more than 32 barrels, i.e. considerably less than the clergy's threshing (which was slightly more than 40 barrels).

The explanation by all accounts is partly that the tithe system had not previously followed the norm of 1/3 to the Crown, 1/3 to the clergy, and 1/3 to the parish church; and partly that the sample threshing result on which the Crown tithe was based on was not as representative as the regulation required. At least the former is hinted at in the tithe records when farmers say that they would not be able to pay as much to the Crown as they did to the clergy.

The complications with the clerical tithe have meant that I have only dared to use the data for a rough estimate of the tendencies in the Halland tithe during the period before 1693. In the following diagram, for parishes where the clergy collected the tithe in the field ("i neken"), I have used the average number of sheaves per giver (sometimes these refer to the land registry farms, sometimes to actual farms). In cases where the clergy has collected his tithe in the field "i neken", I have done the equivalent, and in order to simplify things, multiplied by 30. When individual farms in the sources are without a number, this has been interpreted to mean that no tithe was given this year.

Clergy tithes in Halland county 1665–93, sheaves



Source: Handlingar rörande tionde, volym GIIIe:1, 2 och 3, LLA; Handlingar rörande förvaltningen av kyrkors tillhörigheter och inkomster, vol. G X ad:1, LLA.

The diagram of the tithes in 1665–1693 should be interpreted with caution. What strengthens the credibility is that the trends in the development seem to have their counterparts in Bohuslän and Småland with good harvest years at the beginning of the 1670s and 1680s, but poorer harvests at the end of these decades. (The relatively weak harvests in Halland in 1665–70 have no parallel in Bohuslän, but in parts of Småland/Västergötland). The trends in Halland may also be given a social background. The low harvest levels at the end of the 1670s can be linked to the so called Scanian war in 1676–79, when the county was a theatre of war. Furthermore, the commoner's complaints over the high fixed tithes during 1684–92 (see above) seem to be consistent by the poor harvests shown in the diagram for these years. A generally downward trend in the harvests in Halland from the beginning of the 1670s onwards also finds support in the literature, with information on abandoned farms and fields at the end of the century.⁸⁷

As can be seen, crop estimates before the introduction of variable tithes are very difficult to make. Here I will therefore reproduce some additional fragmentary pieces of information that have emerged in this context. First, the few pieces of information on variable parish church tithes I have found:

⁸⁷ See Palm 1998, pp. 47f.

Parish church tithes, some years, some parishes

Year	County, bailiwick	District	Parish	Rye Barrels	Rye Skäppas	Barley Barrels	Barley skäppas	Barley Swedish	Oats barrels	Oats skäppas	Tithes in reduced grain
1693	Laholms	Tönnersjö	Breared	4		6	3.54		4	1.71	12.5
1693	Laholms	Tönnersjö	Eldsberga	7	1.67	7			2	1.17	15.3
1693	Laholms	Tönnersjö	Enslöv	4	1.21	9	0.75		5	5.75	16.1
1693	Laholms	Hök	Knäred	9	3.5	12	5.48		1	1.67	22.7
1693	Laholms	Hök	Laholms Lands	12	4.23	12	4.58		6	5.98	28.5
1676	Laholms	Hök	Ränneslöv	10		12		5.5			22.1
1677	Laholms	Hök	Ränneslöv	6.83		9		5.5			15.9
1678	Laholms	Hök	Ränneslöv	6		10		5.5			16.1
1679	Laholms	Hök	Ränneslöv	6		10		5.5			16.1
1693	Laholms	Hök	Ränneslöv	7	2.67	8	0.15		3	3	17
1693	Laholms	Hök	Skummeslöv	13	3.13	13	3.13		6	3	30
1693	Laholms	Tönnersjö	Snöstorps	6	3.92	9	0.71		3	2.33	17.2
1693	Halmstad	Halmstad	Torup	2	2.71	3	4.56		5	5.75	8.8
1693	Laholms	Tönnersjö	Trönninge	3	1.67	8	5.17		2	2.88	13
1665	Varbergs	Himle	Tvååker	18	2.5	45	2.88		6	2,5	66.8
1666	Varbergs	Himle	Tvååker	18.17		44.25			6.83		65.8
1667	Varbergs	Himle	Tvååker	15	4	35	1		6		53.6
1681	Laholms	Tönnersjö	Tönnersjö	8		10			10		23
1682	Laholms	Tönnersjö	Tönnersjö	8		10			10		23
1693	Laholms	Tönnersjö	Tönnersjö	6	1.25	5	0.58		2	2.5	12.4
1693	Laholms	Hök	Ysby	4	1.29	2	3.36			4.9	6.8

Sources: Church accounts from respective congregation's church archives and year, LLA.

Readers should note that, in general, it is mainly the weak harvest year of 1693 for which information has been collected. The harvest this year correspond to those in Ränneslöv during the Scanian war of 1676–79.

Some explicit data on annual growth rates have also emerged from the tithe material. They are shown in the following table:

Good and bad years according to the clerical tithe

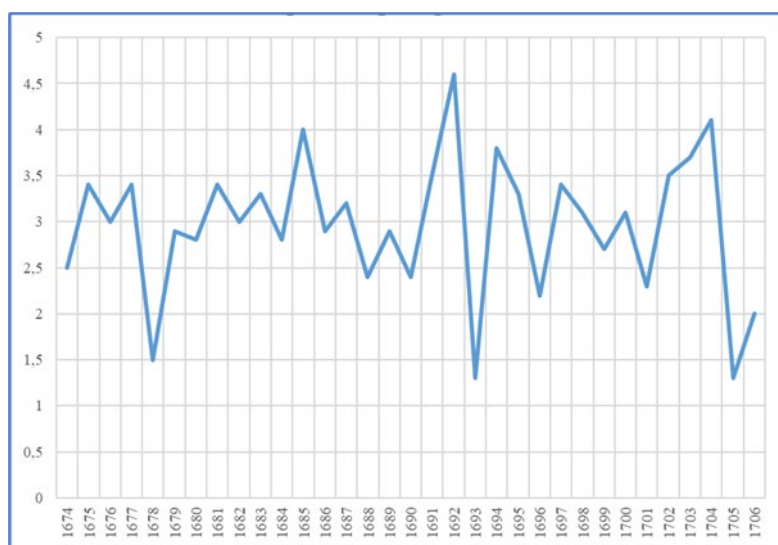
	Good	Mediocre	Poor
Träslöv	1682	1680	1673
Grimeton	1674	1676	1673
Torpa	1683	1679	1676
Fjällgime	1669	1667	1665
Söndrum	1673	1674	1675
Okome	1681	1683	1678
Veinge	1682	1683	1677
Tvååker	1677	1683	1679
Fagered	1673	1674	1672
Harplinge		1665	1670

Source: Tithes commission's document books I and II, in the Halland county accounts office, Handlingar rörande tionde, volym GIIIe:1, 2 och 3, LLA;

One is struck by the fact that the development could obviously vary within a province. 1673 was clearly a very good year in Söndrum and Fagered, while that year in Träslöv and Grimeton was among the worst, a memento when one wants to generalise and estimate harvests in larger areas.

Finally, the following series of cereal harvests for Värö vicarage, centrally located in the province, may be of interest in assessing the development of the harvest. The gross harvests are reported, i.e. without deduction of the seed:

Harvest/seed ratios for Värö vicarage in 1674-1706



Source: Värö church archives, Övriga räkenskaper, volym LV:1, Värö tionderäkenskaper 1674–1706, LLA.

The average grain yields are somewhat under 3 (2.9). Such a yield corresponds well with the the tax material from the period (2–3, see above), as well as what can be calculated from the cadastre maps from the later part of the 1700s.⁸⁸ Given a grain yield of 3 – and especially if the vicarage had a somewhat higher grain yield than the commoner's farms – there is every reason to emphasise the exaggeration in Hillethon's estimates of grain yields of 4–5, which was the basis for the fixed tithe during the period 1684–92 (see above).

An average measure should of course not obscure the fact that great variations occurred from year to year. In some years (1678, 1693 and 1705) the vicarage barely got the seed back (as a gross grain yield of 1 means no grain left when seeds are subtracted). In other years (1685, 1692 and 1704) one skäppa of seed yielded four skäppas of grain. Thus, it was the record years that formed the basis for Hillethon's fixed tithe setting.

Crises

The worst crisis years in Halland appear to have been 1714 and 1719 (i.e., during the Great Nordic War); 1726 (when the commoners in Fjäre district seem to have redeemed parts of their tithes in money) and 1748. Poor harvest years in Halland seem also to have occurred in 1676–79, i.e. in connection with the Scanian war; 1693; 1697–99 (tithes were fixed in Halland in 1695, a year of national crop failure); 1701; 1705 (cf. for the above-mentioned years the Värö grain yield series); 1710–12, 1717–21, and 1726–28. Over time, it can be said that harvests tended to vary less from year to year, but that production generally declines. The harvests in the 1730s and 1740s appear in this way to have been stable indeed, but relatively modest. This tendency is reinforced if one dares to include the harvest series for 1665–94 in the data set (see pivot tables).

Tithes in Halland 1693-1747 (index 1693 = 100)

⁸⁸ Wiking-Faria, P. 2009, p. 232. An average grain yield figure seems thus to have been relatively constant during the century before the 1800s agrarian revolution when it was raised to 4 (around 1820), later 5 (about 1850) and 8 respectively (around 1880), *ibid.*, table 7.2

1693	55
1693	55
1694	102
1695	
1696	72
1697	61
1698	56
1699	56
1700	62
1701	52
1702	94
1703	68
1704	68
1705	60
1706	66
1707	72
1708	70
1709	64
1710	52
1711	50
1712	55
1713	76
1714	24
1715	70
1716	52
1717	39
1718	37
1719	23
1720	33

1721	36
1722	#####
1723	55
1724	43
1725	45
1726	25
1727	27
1728	37
1729	63
1730	51
1731	59
1732	40
1733	34
1734	41
1735	38
1736	38
1737	42
1738	44
1739	75
1740	50
1741	42
1742	51
1743	48
1744	46
1745	47
1746	47
1747	41
1748	26

Variables in the database “Halland”

Variables in the database “Halland”

The page “Grunduppgifterna SND”

Year

County 1913

District

Bailiwick, etc

Parish

Tithes converted to “reduced grain” from the clergy tithes

Wheat tithes in decibarrels

Rye tithes in decibarrels

Barley tithes in decibarrels

Oats tithes in decibarrels

Mixed grain tithes in decibarrels

Pea tithes in decibarrels

Bean tithes in decibarrels

Total unreduced tithes in decibarrels

Total grain tithes in reduced decibarrels (excl. peas and beans)

Estimated harvest straw seed in decibarrels

Index tertial tithes (1694=100)

Source

Remarks

Key to sources

Church accounts, LLA

Urbaria with verifications, Halland county Regional state archives, LLA

LLA = Lund Regional state archives

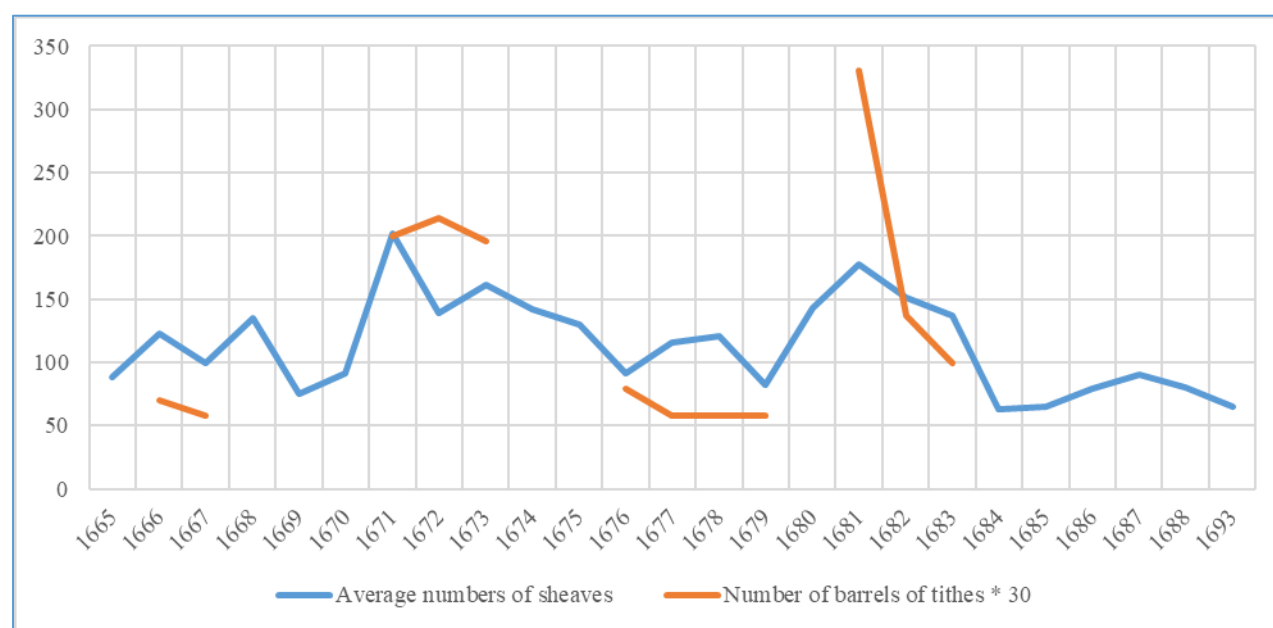
County accounts 1631–1820 Halland county, Länsräkenskaper 1631–1820, RA

Clergy tithes information, LLA

Clergy accounts, LLA

RA= Riksarkivet (State Archives)

Clergy tithes in Halland county 1665–93, sheaves



Source: Handlingar rörande tionde, volym GIIIe:1, 2 och 3, LLA; Handlingar rörande förvaltningen av kyrkors tillhörigheter och inkomster, vol. G X ad:1, LLA.

The diagram of the tithes in 1665–1693 should be interpreted with caution. What strengthens the credibility is that the trends in the development seem to have their counterparts in Bohuslän and Småland with good harvest years at the beginning of the 1670s and 1680s, but poorer harvests at the end of these decades. (The relatively weak harvests in Halland in 1665–70 have no parallel in Bohuslän, but in parts of Småland/Västergötland). The trends in Halland may also be given a social background. The low harvest levels at the end of the 1670s can be linked to the so called Scanian war in 1676–79, when the county was a theatre of war. Furthermore, the commoner's complaints over the high fixed tithes during 1684–92 (see above) seem to be illustrated by the poor harvests shown in the diagram for these years. A generally downward trend in the harvests in Halland from the beginning of the 1670s onwards also finds support in the literature, with information on abandoned farms and fields at the end of the century.⁸⁹

As can be seen, crop estimates before the introduction of variable tithes are very difficult to make. Here I will therefore reproduce some additional fragmentary pieces of information that have emerged in this context. First, the few pieces of information on variable parish church tithes I have found:

⁸⁹ See Palm 1998, pp. 47f.

Parish church tithes, some years, some parishes

Year	County, bailiwick	District	Parish	Rye Barrels	Rye Skäppas	Barley Barrels	Barley skäppas	Barley Swedish	Oats barrels	Oats skäppas	Tithes in reduced grain tithes
1693	Laholms	Tönnersjö	Breared	4		6	3.54		4	1.71	12.5
1693	Laholms	Tönnersjö	Eldsberga	7	1.67	7			2	1.17	15.3
1693	Laholms	Tönnersjö	Enslöv	4	1.21	9	0.75		5	5.75	16.1
1693	Laholms	Hök	Knäred	9	3.5	12	5.48		1	1.67	22.7
1693	Laholms	Hök	Laholms Lands	12	4.23	12	4.58		6	5.98	28.5
1676	Laholms	Hök	Ränneslöv	10		12		5.5			22.1
1677	Laholms	Hök	Ränneslöv	6.83		9		5.5			15.9
1678	Laholms	Hök	Ränneslöv	6		10		5.5			16.1
1679	Laholms	Hök	Ränneslöv	6		10		5.5			16.1
1693	Laholms	Hök	Ränneslöv	7	2.67	8	0.15		3	3	17
1693	Laholms	Hök	Skummeslöv	13	3.13	13	3.13		6	3	30
1693	Laholms	Tönnersjö	Snöstorp	6	3.92	9	0.71		3	2.33	17.2
1693	Halmstad	Halmstad	Torup	2	2.71	3	4.56		5	5.75	8.8
1693	Laholms	Tönnersjö	Trönninge	3	1.67	8	5.17		2	2.88	13
1665	Varbergs	Himle	Tvååker	18	2.5	45	2.88		6	2,5	66.8
1666	Varbergs	Himle	Tvååker	18.17		44.25			6.83		65.8
1667	Varbergs	Himle	Tvååker	15	4	35	1		6		53.6
1681	Laholms	Tönnersjö	Tönnersjö	8		10			10		23
1682	Laholms	Tönnersjö	Tönnersjö	8		10			10		23
1693	Laholms	Tönnersjö	Tönnersjö	6	1.25	5	0.58		2	2.5	12.4
1693	Laholms	Hök	Ysby	4	1.29	2	3.36			4.9	6.8

Sources: Church accounts from respective congregation's church archives and year, LLA.

Readers should note that, in general, it is mainly the weak harvest year of 1693 for which information has been collected. The harvest this year correspond to those in Ränneslöv during the Scanian war of 1676–79.

Some explicit data on annual growth rates have also emerged from the tithe material. They are shown in the following table:

Good and bad years according to the clerical tithe

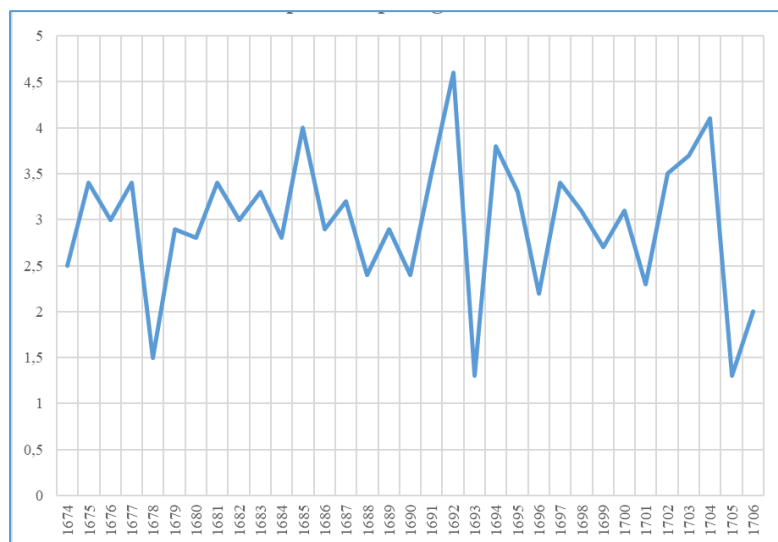
	Good, best	Mediocre	Smallest
Träslöv	1682	1680	1673
Grimeton	1674	1676	1673
Torpa	1683	1679	1676
Fjällgime	1669	1667	1665
Söndrum	1673	1674	1675
Okome	1681	1683	1678
Veinge	1682	1683	1677
Tvååker	1677	1683	1679
Fagered	1673	1674	1672
Harplinge		1665	1670

Source: Tithes commission's document books I and II, in the Halland county accounts office, Handlingar rörande tionde, volym Gille:1, 2 och 3, LLA;

One is struck by the fact that the development could obviously vary within a province. 1673 was clearly a very good year in Söndrum and Fagered, while that year in Träslöv and Grimeton was among the worst, a memento when one wants to generalise and estimate harvests in larger areas.

Finally, the following series of grain yields for Värö vicarage, centrally located in the province, may be of interest in assessing the development of the harvest. Gross yields are reported, i.e. without subtraction of seed corn (for next year's harvest):

Harvest/seed ratios for Värö vicarage in 1674-1706



Source: Värö kyrkoarkiv, Övriga räkenskaper, volym LV:1, Värö tionderäkenskaper 1674–1706, LLA.

The average grain yields are somewhat under 3 (2.9). Such a yield corresponds well with the the tax material from the period (2–3, see above), as well as what can be calculated from the cadastre maps

from the later part of the 1700s.⁹⁰ Given a grain yield of 3 – and especially if the vicarage had a somewhat higher grain yield than the commoner's farms – there is every reason to emphasise the exaggeration in Hillethan's estimates of grain yields of 4–5, which was the basis for the fixed tithe during the period 1684–92 (see above).

An average measure should of course not obscure the fact that great variations occurred from year to year. In some years (1678, 1693 and 1705) the vicarage barely got the seed back (as a gross grain yield of 1 means no grain left when seeds are subtracted). In other years (1685, 1692 and 1704) one "skäppa" of seed yielded four "skäppas" of grain. Thus, it was the record years that formed the basis for Hillethan's fixed tithe setting.

Crises

The worst crisis years in Halland appear to have been 1714 and 1719 (i.e., during the Great Nordic War); 1726 (when the commoners in Fjäre district seem to have redeemed parts of their tithes in money) and 1748. Poor harvest years in Halland seem also to have occurred in 1676–79, i.e. in connection with the Scanian war; 1693; 1697–99 (tithes were fixed in Halland in 1695, a year of national crop failure); 1701; 1705 (cf. for the above-mentioned years the Värö grain yield series); 1710–12, 1717–21, and 1726–28. Over time, it can be said that harvests tended to vary less from year to year, but that production generally declines. The harvests in the 1730s and 1740s appear in this way to have been stable indeed, but relatively modest. This tendency is reinforced if one dares to include the harvest series for 1665–94 in the data set (see pivot tables).

⁹⁰ Wiking-Faria, P. 2009, p. 232. An average grain yield figure seems thus to have been relatively constant during the century before the 1800s agrarian revolution when it was raised to 4 (around 1820), later 5 (about 1850) and 8 respectively (around 1880), *ibid.*, table 7.2

The page “Grunduppgifterna SND”

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Administrative divisions

Jämtland and Härjedalen, former Norwegian provinces, came under Sweden in 1645. In 1658-1761 these regions belonged to the older Västernorrland county. In 1762, Jämtland was transferred to the younger Västernorrland county, and Härjedalen to the then newly formed Gävleborg county. In 1810, the two regions were united again in a new Jämtland county that was formed at that time. The city of Östersund was founded in 1786.

In 1801, Härjedalen presented itself to a new tithes parish: Linsell Chapel. In the database, its tithes are merged with those of Sveg parish to which congregation it belonged. In 1823, Storsjö Chapel turned up, and its tithes have been merged with those of Hede parish in the database.

Database

The regions are included in the database for “Jämtland och Härjedalen”.

Source materials

These provinces’ history has brought with it the fact that their tithes information must be sought in several different places. Their tithes material in the National Archives is sometimes included in the same county accounts as Gästrikland, Hälsingland, Medelpad and Ångermanland up until the formation of Jämtland county, and thereafter in that county’s accounts. Parish figures have not been available for the years 1665-1669, 1671-1672 and 1674-1677.¹¹⁰

From and including 1694, there are almost yearly crown accounts for Jämtland, and more sporadically for Härjedalen, preserved in the Jämtland county accounts in the Östersund regional National Archives. To judge from the page-numbering, these have been excised from the Västernorrland and Gävleborg regional state archives’ verifications, probably in connection with Jämtland’s becoming a separate county in 1810.¹¹¹

Through the provinces’ partly extremely individual tithes system (see below), there is yet another source with tithes information – the parish churches’ church accounts.

Otherwise the accounts for the 40th part of the tithes that went from these regions to the Stockholm Orphanage have been used to access bailiwick-wise information, since each province here was a separate bailiwick.¹¹²

The tithes system

What did the tithes system in Jämtland and Härjedalen look like? The conditions differed there in a couple of important respects from the corresponding conditions in the rest of Sweden: the clergy kept

¹¹⁰ A fragment among the National Archives’ county accounts has provided three legible parish figures for 1667.

¹¹¹ Lists from the Västernorrland county archives from 1685 have been found at the regional National Archives in Härnösand.

¹¹² Some sources of possible interest in our context could not be investigated within the framework of this project. In the Östersund regional National Archives: Kronofogdens i Härjedalens arkiv 1668-; Häradsskrivarens i Härjedalens fögderi 1700-; Häradsskrivarens i Jämtlands fögderi arkiv 1689- ; In the central National Archives in Stockholm possibly: Kommissioner och kommittéer A Tillståndet i orterna Rannsaktionskommission till Väster- och Österbotten 1672 with its Relation och handlingar ang. Härnösands gymnasium och rannsaking i Jämtland, as well as possibly preserved accounts from Frösö school that received part of the church tithes. Jämtland’s dragoons’ archives in KrA may also contain tithes information.

half of the total tithes amount, except for the parishes Fors, Hällesjö and Håsjö where the parson kept two-thirds.¹¹³

In the tithes lists for the two provinces, numerous test threshings are found, as a rule posted farm by farm. In 1663-1665, tithes in Jämtland (and in Hälsingland's northern bailiwick) were controlled by a "tithes bailiff" (Sw. literally "tiondefogde"). He was allowed to keep half of any increase he was able to raise in the tithes over and above what was budgeted for the military for certain regions. The tithes inspector's verification shows the tithes "according to the tithes lists".¹¹⁴

Parish churches' tithes

Church tithes were sometimes also called "the churches' wine and buildings grain". In Jämtland, the church kept $\frac{1}{3}$ of *Crown tithes*, somewhat confusingly called the "tertial"; in Härjedalen $\frac{1}{4}$ of *Crown tithes*, called the "kvartal".¹¹⁵ In the 1662 cadastre it emerges that the churches' portions had been estimated "after the dustbarrel (cf. p. 0000000000) and the Orphanage grain had been deducted". In 1674, the order was given for one further deduction to be made for the so-called "Printing barrel" allocated to the Antikvitetskollegium.¹¹⁶ It emerges from the county accounts that this deduction in Västernorrland county was only introduced in practice in 1681.

The church accounts' tithes accounting generally followed a common pattern for the period, and sometimes it was said that tithes were "according to the *county scribe's* calculations". Sometimes these scribe's calculations seem to have applied to the total tithes, as far as we can judge; so for Myssjö parish for example was written in 1689: 25 November tithes were taken in and after reshovelling they run to 41:3:6.¹¹⁷ Such figures have been divided by 3 in the database for Jämtland, and for Härjedalen by 4.

Where the database has made use of the churches' tithes, the Crown tithes have been able to be reconstructed according to the following formulas that have been shown to keep very close to the crown's tithes information (barrels) where both types of information exist. Multiplication by 40/39 is because the Orphanage tithes' 40th part has been subtracted from the Crown tithes before the churches' "tertials" and "kvartals" have been estimated.

Jämtland

For some years before 1688, because of the lack of available crown accounts, the churches' tithes according to their accounts have been used to reconstruct Crown tithes. In calculations of the database's tithes from church accounts, up until and including 1681 the following formula (a) has been shown to land on practically the same figures as the crown's accounts:

$$a. ((\text{church accounts of the tithes retained by the church} * 3) + \text{dustbarrel}) * (40/39)$$

From and including 1681 the following formula (b) has been used:

$$b. ((\text{church accounts of the tithes retained by the church} * 3) + \text{dustbarrel} + \text{printing barrel}) * (40/39)$$

¹¹³ Lars Gustaf Linde 1887, p. 297 with notes. Rabenius 1853 pp. 48, 68, 84 n. 5 that the same conditions had applied at least at the time of queen Kristina's resolution 24 Dec. 1645.

¹¹⁴ See County accounts, RA, 1665, p. 580 f, 690, and 1666 p. 562, 565 f.

¹¹⁵ In the 1647 cadastre for Härnösand county, to which Jämtland then belonged, it has been noted that the province's churches "of age" enjoyed the tertial, i.e. 1/3 of the tithes retained by the crown, and in Härjedalen 1/4. Cited according to Rabenius 1853, p. 84, n. 5. See also Palm's "Sverige 1630" under Jämtland.

¹¹⁶ Rabenius 1835, p. 84-86; Lars Gustaf Linde 1887, p. 303. The information is confirmed by the Västernorrland county accounts.

¹¹⁷ 1678 mentioned in Hammerdal "reshovelling slip" (Sw. omkastningssedel).

The dustbarrel remained unchanged during this period and amounted to 1 barrel in Jämtland for a main congregation and 0.5 for the annex.¹¹⁸

Härjedalen

Here the local churches' portion constituted a quarter of the crown's grain. To judge from the crown accounts, the printing barrel was also introduced for Härjedalen in 1681, but on the other hand no half dustbarrel seems to have been subtracted before the Härjedalen churches' tithes were estimated at the end of the 17th century. Reconstruction of the crown's tithes has therefore been done according to the parish church tithes based on the following formula:

$$((\text{church accounts of tithes retained by the church} * 4) * (40/39))$$

These calculations from the parish churches' tithes do not correspond exactly to those in the crown accounts, and discrepancies occur that are hard to analyse. Behind these may lie roundings-off in the former and uncertainties concerning the treatment of the Orphanage barrel. The differences are however not greater than that the church tithes can be used as a surrogate for missing crown accounts.

When ordinary crown accounts are missing, the information for 1663-1665 from the tithes inspector mentioned above has been transferred to the database rather than the calculations that can be made from the church accounts for a number of parishes.

From and including about 1690, Frösö school was awarded 1/3 of the churches' tertials in Sveg, Lillherredal, Vemdalen, Älvros and Överhogdal parishes. In some cases, only the churches' net sum is given after these deductions and I have then not excerpted this.

In 1695-1723, the parish church portions of Jämtland's and Härjedalen's tithes were fixed where the Crown tithes were fixed.

Fixed tithes

In Jämtland and Härjedalen, a contract was concluded for fixed tithes from and including the harvest year 1695. However, in Jämtland a number of parishes continued with adjustable tithes.¹¹⁹ These were: Alsen, Aspås, Hallen, Hammerdal, Kall, Marby, Mattmar, Mörsil, Norderö, Näs, Näskott, Offerdal, Rödön, Ström, Undersåker, Åre and Ås. From and including 1724, both provinces returned totally to harvest-dependent tithes.

In Jämtland, Ragunda, Fors, Hällesjö, Håsjö and Stugun parishes regained fixed tithes in 1775 which they then kept. From and including 1780, further attempts were made to introduce fixed tithes "for 20 years" and during the coming years, a number of parishes went over to these, but Offerdal, Undersåker and Åre continued with harvest-dependent tithes in the whole parish, and Klövsjö in almost the whole parish.¹²⁰ In 1790, it was decided that Föllinge, Hammerdal, Häggenås, Kall, Kyrkås, Lit, Mörsil, Rätan and Ström should once again have variable tithes, although some of these were only for a brief period.¹²¹ In 1799 there were nine parishes with harvest-dependent tithes in Jämtland. However, accession to the system with fixed tithes faltered and in 1800 the great majority of parishes returned to variable tithes when the contract's 20-year period was over. In 1800, once again 30 parishes suddenly had harvest-dependent tithes. In 1809, nine parishes still had harvest-

¹¹⁸ Compare Lars Gustaf Linde 1887, p. 304 who states other figures for the country as a whole.

¹¹⁹ The 1695 tithes setting seems to have built on the medium tithes for 1691, 1692, and 1693, to judge from the church accounts in Oviken parish.

¹²⁰ Two villages in Klövsjö parish had fixed tithes. Their fixed amounts are included in the parish sums of the database.

¹²¹ In Lit parish, a few farms retained fixed tithes according to a tithes setting in 1773, and in 1790 several still retained fixed tithes.

dependent tithes, and as late as 1817, all of Jämtland's parishes once again had fixed tithes.¹²² In a number of parishes, certain individual farmers held onto adjustable tithes and a close examination of their tithes lists, that has however not been possible within the framework of this project, might provide a good deal more tithes series for Jämtland from and including the end of the 1700s.¹²³

With the exception of Överhogdal parish, where from and including 1821 tithes were based on the number of the local cadastral tax assessment unit "trög", Härjedalen continued with harvest-dependent tithes until and including 1858, by all accounts a Swedish record.¹²⁴

Jämtland's and Härjedalen's tithes 1695-1723?

An attempt was made to estimate the whole of Jämtland's tithes based on the parishes that continued with harvest-dependent tithes even after the 1695 agreement. The attempt was not very successful since the estimated Jämtland curve was to show greater oscillations between the years than when the whole province had adjustable tithes. The explanation is plain if we see which parishes continued to have harvest-dependent tithes after 1694 – they are almost all situated north or east of Lake Storsjön, in those parts of Jämtland that is characterised by fells and other terrain that is less adapted to cultivation. These were areas where cultivation was uncertain and grain often froze. This is probably the explanation for the peasantry for the time being not being willing to tie itself down with fixed tithes in good and bad times. Their cautiousness soon proved justified when the 1690s bad harvests in Norrland also hit Jämtland (see below).

Measuring vessels' volume, measuring barrel

In the 1739 extract, the two provinces still counted in Swedish pottles. In 1740 and the following years, they had however progressed to kappes in the entire material.

The barrel as measuring unit, measuring method, excess measures

Before 1739, the crown accounts show excess measures as a separate supplement in the extract, and the extracts' parish-wise sums therefore refer to tithes in levelled-off measuring vessels. The new measuring method that was ordered in 1733 meant that barrels before excess measure should also be shaken and shovelled. This was in contrast to the 1638 decision about barrels only being levelled-off. It has not left any traces in the source materials gone through here during the period when this measuring method was used, i.e. until and including 1736. Neither has the return to levelling-off before excess measure during 1737 and 1738.¹²⁵

In connection with new regulations about excess measures in 1739, came new changes in tithes accounting for the province. The extracts' tithes sums were given the heading "main yield of loose and levelled-off measure with 4 kappes per barrel". The extract's tithes amount refers thus to barrels with full measure, so-called **rental measure** (Sw. *avradsmål*).¹²⁶ As emerges in the chapter "Västernorrland", the classified barrels for the county to which Jämtland and Härjedalen then belonged correspond *in number* to the tithes lists' tithes estimates in levelled-off barrels based on stooks counted and test threshing.¹²⁷ In 1740 and all the following years, the tithes lists' final sums are the same as the sums in the extract.

However, the change had already been introduced in the 1739 extract. No separate account of the excess measure was made as had been done up to and including 1738. However, a certain

¹²² On account of the reconstruction of the National Archives, the access to Jämtland and Västernorrland counties has **to some extent** been hindered at the time this project came to an end.

¹²³ This concerns Alsen, Berg, Bräcke, Föllinge, Hackås, Hammerdal, Håsjö, Häggenås, Lit, Mattmar, Ragunda, Rätan and Sundsjö parishes.

¹²⁴ How Överhogdal's tithes were counted emerges in among others the 1848 tithes extract for the province.

¹²⁵ See Morell 1988, p. 41 ff.

¹²⁶ See Morell 1988, p. 42.

¹²⁷ Possibly first by mistake the tithes lists now included excess measure of 6 kappes per barrel before reduction, in 1739 the recommendation was 6 kappes as excess measure *for malt*, for other grain however 4. See Morell 1988, p. 42.

unsureness about the new arrangement seems to have prevailed. For unclear reasons, a deduction of 2 kappes per barrel has been made from the barrels measured for the peasant farmers in the tithes lists. By that means, a new, lower sum has been obtained and it is this that later in the extract was included under the new heading mentioned above: “main yield of loose and levelled-off measure with 4 kappes per barrel”. I have interpreted the 1739 extract sums in the same way as those of the following years.

The tithes accounts in the church accounts seem to have varied. During the final years of the 17th century, tithes volumes were sometimes defined as full measure, sometimes as “levelled-off measures with excess measures in addition” or even “shaken and levelled-off”. I have put all the tithes amounts into the database, excluding the supplementary excess measures when these were possible to separate out, and assumed that the other amounts correspond *in number* to tithes in levelled-off barrels. Some uncertainty in this regard remains however concerning the 25 or so pieces of tithes information estimated from the church accounts for the two provinces.¹²⁸

The Stockholm Orphanage’s bailiwick figures before 1716 refer, according to my interpretation, either to levelled-off barrels with separate accounting for the excess measures, or barrels with excess measures, *numerically as many* as the tithes lists’ levelled-off barrels. The excess measures were added when the peasant farmers’ taxed tithes according to the tithes lists were finally measured upon the grain being delivered to the tithe barn. The excess measure is called variously “råga” and “övermål” in the Orphanage material.

Harvest estimates

Normally in Sweden, the crown’s portion of the tithes was 2/3, which for a harvest estimate should thus be multiplied by 15 (obtained as $3/2 \cdot 10$). However, in Jämtland and Härjedalen the crown retained half of the tithes as has been stated above, apart from the parishes Fors, Hällesjö and Håsjö where the parson received 2/3. Where the parson received half, a harvest estimate had thus to be made from the entire Crown tithes by multiplication by 20 (obtained as $2/1 \cdot 10$). In the estimates that have been made, additions for tithes-exempt farms have been based on the total number of assessment units of land, mostly mantals, and on the vicarages’ mantals of land taken from the beginning of the 1800s (noble manors where extremely rare in the two provinces).¹²⁹

As usual, an attempt is made in the following to summarise the harvest development in the region from the database. Calculations are made here most suitably on the bailiwick level i.e. by province. For the time prior to 1716, the Orphanage accounts are used mainly, and after that sums from the crown’s tithes extracts. Since harvest estimates are made per bailiwick, consideration has had to be taken to the tithes’ varying division between the crown and the clergy in different parts of the country. As multipliers, the unweighted average of the crown’s proportion in the various bailiwicks has been used for the estimates according to the following:

¹²⁸ A comparison between the tithes inspectors’ information and the church accounts’ where both types of information exist shows that the inspectors’ information on average lands 4 % (1665) and 3 % (1666) under the estimates made from church accounts. The cause of these differences has not been more closely investigated here. Much speaks however for the fact that the excess measure played a role: in Bräcke parish’s accounts for 1693 is written e.g. ”The (1)693 tertial like the excess measure is in levelled-off measure ...”. The sums that I have taken from the tithes inspectors’ information are however excluding excess measure,” the excess measure 3 Swedish pottles per barrel”. If one adds 3 Swedish pottles per barrel to the tithes inspectors’ sums, they end up in 1665 on average 1 % and in 1666 about 2 % above the church accounts’.

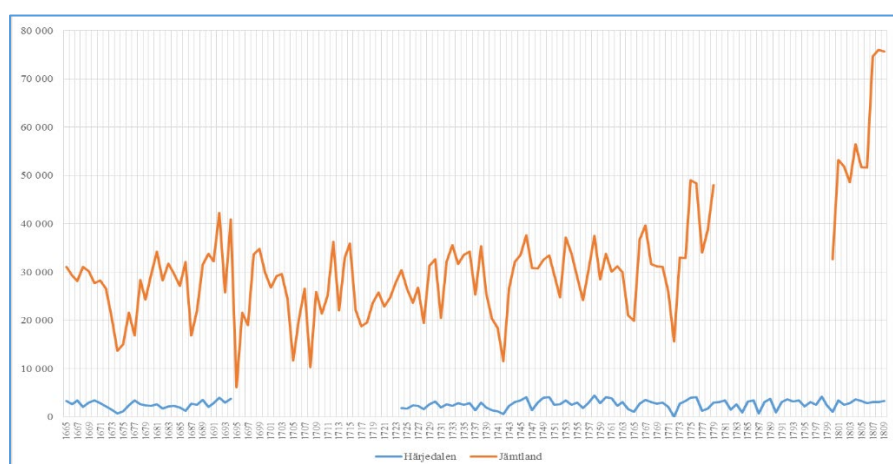
¹²⁹ af Forsell 1834; Westerling 1838.

Province:	Proportion:
Härjedalen	2
Jämtland	1.46

As usual in this project, a ten-percent mark-up has been added to compensate for underestimates in the original measuring etc. The harvests only concern reduced straw grain.

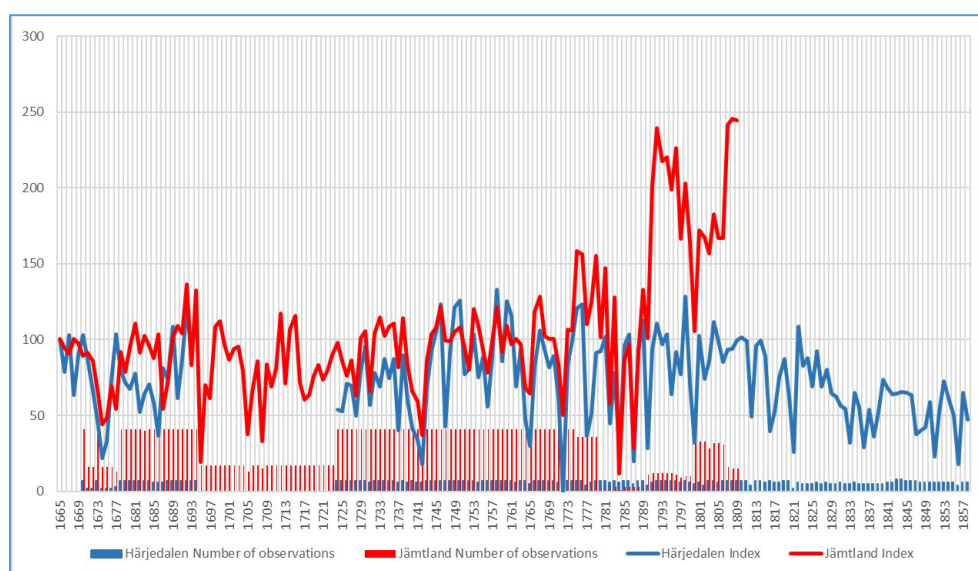
For the long period 1695-1723, many parishes in Jämtland and the whole of Härjedalen had fixed tithes. In the harvest estimates it has been important as far as possible to cover even periods with large proportions of “fixed” parishes. For the fixed parishes in Jämtland, the harvests in 1695-1723 have been estimated with the help of an annual average index with the base year 1665 taken from the “harvest-dependent” parishes. The estimates of the harvests have taken place by multiplication of index by the estimated harvests during the base year (divided by 100). The same method has been applied when a number of parishes returned to fixed tithes during the 1770s. In 1780-1799 however, the adjustable parishes became so few that I have not dared to continue with this type of estimate. In 1800, the number of parishes with harvest-dependent” tithes increased again and became sufficient for me to use the index once again for an estimate of the remaining “fixed” parishes’ harvests. After 1809, they once again became too few to be a basis for reasonable calculations. In the following diagram, the harvests thus estimated are shown for the two provinces in 1665-1809:

Estimated harvests in Jämtland and Härjedalen in 1665-1809 (barrels of reduced grain)



In order to gain an indication of the development in an even longer perspective, an index has been produced with the base year 1665 without any consideration to its strongly variable foundation in number of parishes with information. The index is constructed from the annual averages in the parish index that has been produced, or, when there is none, the bailiwick index. The results have been included in the following diagram, in which the number of parish observations at different points in time are also given (Jämtland had c. 41 parishes, Härjedalen 8).

Tithes in Jämtland and Härjedalen in 1665-1857 (index 1665 = 100) and number of observations



The index is obviously uncertain where the parishes are few. The big variations for Jämtland at the end of the 1700s in particular build on very little information.

Crises

If nothing else is said, the following information is taken from the same sources as the data in the file "Grunddata".

Jämtland

The war in 1676-1679 meant there were difficult interruptions in the provinces' farming, about which some notices: 1675 Näskott parish: "only 3 barrels were given to the church by the Danes"; in 1675 it was said that the parish churches' tithes in many cases were requisitioned "for the maintenance of the military"; this was repaid however the following year and the amounts were stated. In 1677 the tithes were robbed by Danish-Norwegian troops for at least Bräcke and Ås parishes, and in Näskott, "the Danes" again only allowed the church to retain three barrels when tithes were taken in.

The 1690s agricultural crisis that hit Norrland particularly hard also struck at Jämtland, and 1695 was a catastrophic year with drastically diminished harvests according to the church accounts: for Näs parish it was said that everything froze, in Hammerdal no grain was harvested and not was there any in Mörsil "to God complaining". Several other parishes did not provide any tithes either. In Norderö, the tithes did not even suffice for the customary reductions, "God better". In Undersåker, "most regrettably there was no tertial for the church on account of the terribly bad harvest". In 1696, the harvests were once again inferior. In Ström about half of the 1696 tithes were loaned out to the peasantry. The three tithes barrels in Ström were said besides to be useless for bread if they were not mixed with something else. One gets the impression that parts of the seed grain had been eaten up.

The disturbances in the agriculture continued: In 1698, it is stated for Offerdal that the year's "tertial ... that in this year, on the Schools' earnest application, was taken in undried, and rather wet and ... in number, namely 28 barrels, five firkins and 5 kappes, all in levelled-off measure."... An interesting addition is moreover made here: "However, NB **If this grain lies unsold for a long time**, it will probably dry pretty well, so for this tertial..."

Now and then during the 1700s, some parishes were hit by frost (e.g. 1705, 1708). The end of the century could also be problematic: in 1772 the province's agriculture was hit by a dramatic setback, and very low tithes were paid in according to the crown accounts; in 1784 all grain froze in Undersåker and Åre; in 1785 for Klövsjö it is said that the grain "before harvest was blown to bits by hard weather ... as can be seen in the field as well as in the ears in the sheaves"; in 1787, many peasants in the "harvest-dependent" parishes obtained green frozen grain, some nothing at all; there was frost in several parishes in 1790 and 1791. In 1800, most parishes returned to harvest-dependent tithes, probably on account of the bad harvests, and in many places the grain had frozen, been cut and put on hayracks, which meant that the tithes could not be estimated.

Härjedalen

This province was hit in more or less the same way as Jämtland, but it was not only in the 1690s that the weather struck against the harvests. It is stated e.g. in 1668 in Älvros parish accounts that the year's tithes were very damaged by cold.

In 1772, the church accounts mention bad harvests on account of frost in the whole of Härjedalen, "generally bad harvests", "no grain this year", "totally frostbitten" and similar. The crown's retained tithes were bought up by the peasant farmers at auctions.¹³⁰ No real information about the tithes has been found for this year. In 1777, no grain was harvested in Hede, Vemdalen or

¹³⁰ Gävleborgs läns länsstyrelse, landskontoret, E1b:222, HÄL.

Tännäs. In the tithes list for 1800 was written that no tithes had been taken from isolated peasant farms and distantly situated mountain villages in Sveg parish; Tännäs did not hand in any tithes.

Tännäs did not account for any tithes for several years, probably because of agricultural difficulties. Potatoes seem to have been the saviour here: in 1820, on a piece of paper with no page number among the accounts, it is mentioned that Tännäs had not obtained any grain and mostly grew potatoes, with grain being purchased from Norway. Tännäs was sometimes left out of the tithes extracts in 1837. A notice for Tännäs in 1838 conveyed the following: “Unripe grain destroyed by cold and most (of the farmers)... are not harvesting”. In 1839, the unripe grain had again been destroyed by cold.

In 1836, that year’s low tithes in Hede parish were explained in the following notice: “Unripe grain destroyed by cold in the whole church village”.

Other

In 1695 it was stated that for Lillherrdal parish a small amount of “Finnish rye” had been harvested as tithes.

Tithes in Jämtland 1665-1809 (Index 1665 = 100)

Year	Index	Number of parishes observed
1665	100	Province total
1666	94	Province total
1667	91	Province total
1668	100	Province total
1669	98	Province total
1670	89	41
1671	91	16
1672	86	16
1673	67	38
1674	44	16
1675	48	16
1676	70	16
1677	54	13
1678	92	41
1679	79	41
1680	95	41
1681	110	41
1682	91	41
1683	103	40
1684	96	41
1685	88	41
1686	104	41
1687	54	41
1688	71	41
1689	102	41
1690	109	41
1691	104	41
1692	137	41
1693	83	41
1694	132	41
1695	20	17
1696	70	17
1697	61	17
1698	109	17
1699	112	17
1700	96	17
1701	87	17
1702	94	17
1703	96	17
1704	79	17
1705	37	13
1706	65	17
1707	86	17
1708	33	15

1709	84	17
1710	69	17
1711	81	17
1712	117	17
1713	71	17
1714	107	17
1715	116	17
1716	72	17
1717	61	17
1718	63	17
1719	76	17
1720	83	17
1721	74	17
1722	80	17
1723	90	17
1724	98	41
1725	86	41
1726	76	41
1727	86	41
1728	63	41
1729	101	41
1730	106	41
1731	66	41
1732	104	41
1733	115	41
1734	102	41
1735	108	41
1736	110	41
1737	82	41
1738	114	41
1739	83	41
1740	66	41
1741	60	41
1742	37	41
1743	86	41
1744	103	41
1745	108	41
1746	122	41
1747	100	41
1748	99	41
1749	105	41
1750	108	41
1751	95	41
1752	80	41
1753	120	41
1754	109	41

1755	93	41
1756	78	41
1757	99	41
1758	121	41
1759	92	41
1760	109	41
1761	97	41
1762	101	41
1763	97	41
1764	68	40
1765	64	41
1766	118	41
1767	128	41
1768	102	41
1769	101	41
1770	100	41
1771	84	41
1772	50	41
1773	106	41
1774	106	41
1775	158	36
1776	156	36
1777	110	36
1778	125	36
1779	155	36
1780	102	3
1781	147	2
1782	58	3

1783	128	3
1784	12	1
1785	87	3
1786	97	3
1787	28	3
1788	92	3
1789	133	3
1790	101	11
1791	201	12
1792	239	12
1793	218	12
1794	220	12
1795	199	12
1796	226	11
1797	166	9
1798	203	10
1799	164	10
1800	105	32
1801	172	33
1802	167	33
1803	157	28
1804	183	32
1805	167	32
1806	167	31
1807	241	16
1808	245	15
1809	244	15

Tithes in Härjedalen 1665-1809 (Index 1665 = 100)

Year	Index	Number of parishes observed
1665	100	Province total
1666	79	Province total
1667	103	Province total
1668	64	Province total
1669	90	Province total
1670	103	7
1671	87	2
1672	66	2
1673	46	7
1674	22	2
1675	33	2
1676	73	2
1677	104	3
1678	80	7
1679	71	7
1680	68	7
1681	78	7
1682	52	7
1683	64	7
1684	70	7
1685	58	6
1686	37	6
1687	81	6
1688	74	7
1689	108	7
1690	61	7
1691	87	7
1692	121	7
1693	91	7
1694	115	7
1695- 1723	-	-
1724	54	7
1725	53	7
1726	71	7
1727	70	7
1728	50	7
1729	80	7
1730	96	7
1731	57	6
1732	78	7
1733	69	7
1734	87	7
1735	75	7

1736	87	7
1737	40	6
1738	90	7
1739	60	6
1740	42	7
1741	34	6
1742	18	6
1743	68	7
1744	92	7
1745	105	7
1746	123	7
1747	43	7
1748	91	7
1749	121	7
1750	126	7
1751	77	7
1752	81	7
1753	103	7
1754	75	6
1755	88	7
1756	56	7
1757	88	7
1758	133	7
1759	86	7
1760	125	7
1761	116	7
1762	69	6
1763	93	7
1764	47	7
1765	30	5
1766	82	7
1767	106	7
1768	93	7
1769	81	7
1770	89	7
1771	62	6
1772	-	-
1773	83	7
1774	99	7
1775	121	7
1776	123	7
1777	37	4
1778	51	6
1779	91	7
1780	93	7
1781	102	7

1782	45	6
1783	78	7
1784	28	6
1785	96	7
1786	104	7
1787	20	5
1788	94	7
1789	113	7
1790	29	4
1791	94	6
1792	111	7
1793	97	7
1794	103	7
1795	64	7
1796	92	7
1797	77	6
1798	129	7
1799	71	6
1800	32	5
1801	103	6
1802	74	4
1803	86	7
1804	112	7
1805	99	6
1806	85	7
1807	93	7
1808	94	7
1809	99	7
1810	101	7
1811	99	7
1812	50	4
1813	96	7
1814	99	7
1815	89	6
1816	40	7
1817	52	6
1818	75	6
1819	87	7
1820	62	7

1821	26	2
1822	109	6
1823	83	5
1824	88	5
1825	69	5
1826	92	6
1827	69	5
1828	80	6
1829	65	5
1830	62	5
1831	56	6
1832	54	5
1833	32	5
1834	65	6
1835	55	5
1836	29	5
1837	54	5
1838	36	5
1839	52	5
1840	74	5
1841	68	6
1842	64	6
1843	65	8
1844	65	8
1845	65	7
1846	64	7
1847	37	7
1848	40	6
1849	42	6
1850	59	6
1851	23	6
1852	52	6
1853	72	6
1854	60	6
1855	50	6
1856	18	4
1857	65	6
1858	47	6

Variables in the **database**/document "Jämtland och Härjedalen"

The **page** "Grunddata"

År = Year

Fögderi A (fögderiindelning enligt källmaterialet) = Bailiwick A (bailiwick division according to the source material)

Fögderi B (fögderiindelning enligt källmaterialet, men för Jämtlands del separerad på socknar med rörligt tionde 1695-1723, och med fast samma period) = Bailiwick B (bailiwick division according to the source material, but for Jämtland separated into parishes with harvest-dependent tithes 1695-1723, and with fixed tithes same period)

Socken A (sockenindelning enligt källmaterialet) = Parish A (parish division according to source material)

Socken B (under perioden delade socknar förts samman under ursprungssocknens namn) = Parish B (during this period separated parishes, joined under original parish's name)

Tiondevete i decitunnor = Wheat tithes in decibarrels

Tionderåg i decitunnor = Rye tithes in decibarrels

Tiondekorn i decitunnor = Barley tithes in decibarrels

Tiondehavre i decitunnor = Oats tithes in decibarrels

Tiondeärtor i decitunnor = Pea tithes in decibarrels

Tionde råg och ärtor i decitunnor = Rye and pea tithes in decibarrels

Tionde i "spannmål" i decitunnor = "Grain" tithes in decibarrels

Summa tionde i oreducerade decitunnor = Total tithes in unreduced decibarrels

Summa tionde i decitunnor ren säd (exklusive ärtor) = Total tithes in decibarrels reduced grain (excluding peas)

Beräknat kronotionde i decitunnor ren säd (exklusive ärtor) = Estimated Crown tithes in decibarrels reduced grain (excluding peas)

Totala tiondet i ren säd (tiondet i ren säd exklusive ärtor och uppräknat med hänsyn till prästernas och sockenkyrkornas varierande andelar av det totala tiondet, motsvarar således i princip 1/10 av skörden) = Total tithes in reduced grain (excluding peas) and rounded off upwards with consideration to the clergy's and parish churches' varying portions of the total tithes, corresponding thus in principle to 1/10 of the harvest)

Index 1670 (sockenindelning enligt Socken B) = Index 1670 (parish division according to Parish B)

Index (1670=100) = Index (1670=100)

Källor = Sources

Anmärkning = Remarks

The **page** "Tiondeindex 1665-1858"

Fögderi = Bailiwick

Index (1670=100)

Index (1665=100)

Observationer = Number of parishes in index base

Anmärkning = Remarks

The page "Fögderisummor"

År = Year

Län 1913 = County within borders of 1913

Fögderi = Bailiwick

Tionde vete i decitunnor = Wheat tithes in decibarrels

Tionde råg i decitunnor = Rye tithes in decibarrels

Tionde korn i decitunnor = Barley tithes in decibarrels

Tionde havre i decitunnor = Oats tithes in decibarrels

Tionde i råg och ärtor i decitunnor = Rye and pea tithes in decibarrels

Tionde i spannmål i decitunnor = "Grain" tithes in decibarrels

Tionde ärtor i decitunnor = Pea tithes in decibarrels

Tiondet i oreducerade decitunnor = Tithes in un-reduced decibarrels

Tiondet i decitunnor ren säd (exklusive ärtor) = Tithes in decibarrels reduced grain (excluding peas)

Kronans andel av tionde = Crown's portion of tithes

Totalt tionde i decitunnor = Total tithes in decibarrels

Totalt mantal enl af Forsell = Total mantals of land (Forsell)

Prästgårdarnas mantal = Vicarages' mantals of land

Beräknad skörd i decitunnor ren säd (exklusive ärtor) = Estimated harvest in decibarrels reduced grain (excluding peas)

Källa = Source

Key to file "Grunddata"

Gävleborgs landskontor E1b:130, HÄL

Gävleborgs läns landskontor, landsböcker och verifikationer, HÄL

HÄL = Landsarkivet i Härnösand

Jämtlands läns landskontor, GIIg:1, ÖLA

Jämtlands läns landskontor, GIIg:1, ÖLA

Jämtlands läns landskontor, serie E1b: volym, ÖLA

Kyrkoarkivets räkenskaper, ÖLA

Länsräkenskaper, Gävleborgs län, landsböcker och verifikationer, RA

Länsräkenskaper, Jämtlands län, landsböcker och verifikationer, RA

Länsräkenskaper, Västernorrlands län, landsböcker och verifikationer, RA

RA = Riksarkivet = central National archives, Stockholm.

SSA = Stockholms stadsarkiv = Stockholm City Archives

Stockholms barnhus, Huvudbok, SSA

ÖLA = Landsarkivet i Östersund = regional National archives, Östersund

Key to page "Fögderisummor"

Barnhuset * 40 = Stockholms barnhus, Huvudbok, SSA, its tithes sums multiplied by 40.

Landsbok RA = Länsräkenskaper i riksarkivet, see page "Grunddata" above

Sockendatabasen = Tithes figures according to "Grunddata" above.

Kopparberg

Lotta Leijonhufvud

Administrative divisions

This was an independent county with the exception of the period 1641-1646. The previously Norwegian parishes of Särna and Idre were included in Sweden in 1645. They were for a long time in many ways outside the Swedish tax system and the border with Norway was uncertain right up until 1751. For the county's various bailiwicks during the period of my investigation see the chapter on Kopparberg county in Lennart Palm's earlier project.¹³¹

Among a number of irregularities in the church and civil division may be mentioned Finsta, which belonged to Hedemora parish according to the cadastre, but its tithes were paid in Säter parish. Hedemora town and parish had a shared tithes list.¹³²

Two different bailiwick and parish divisions have been added to the database, one that follows the sources and one in which the regions that sometimes occur as shared in the sources have been joined together to simplify comparisons over time: bailiwick A refers thus partly to Österdalarna above and partly to Österdalarna below Siljan, and in bailiwick B these two are joined together. In both cases, Mora parish, about which we have more comprehensive information, has been broken out as its own "bailiwick" in the database.

Concerning the parishes of Stora Tuna, there are the distinctions "above the bridge" and "beyond the bridge", the Ovanbro part and the Utombro part. These names show on which side of the Tuna river the area was situated, north or south of the Tuna river respectively. Here a separate parish column B has been created in the database to handle the breakouts from the parish that occurred during the period of investigation. In column "Parish B", the villages Silvberg, Skärsjö and Gustafs have been added to Tuna beyond the bridge.

In 1716, the Stockholm Orphanages (see below) Västerdalarna and Västerbergslagen occur under the same figure. In the database it has been divided according to the allocation in the surrounding years (Västerdalarna has been assumed to stand for 38.35 % of the merged figure).

Source materials

Throughout the period, Kopparberg county has well preserved documents among the State Archives county accounts. Only a few years are missing or are so badly damaged that they are not on loan. Uppsala regional state archive (ULA) has most often been able to cover these missing years. For a couple of years, the Orphanage accounts in the Stockholm City Archives (SSA) have been able to be used. The table below shows which years it has not been possible to find tithes on the parish level.

¹³¹ Palm 2012.

¹³² Lagerstedt 1973, p. 113.

The years when material on the parish level is missing for Kopparberg county

Year	Comment
1667	Verifications among the central National Archives' county accounts damaged. Unspecified tithes at bailiwick level from Uppsala regional archives have been used.
1672	Verifications and county main ledger among the National Archives' county accounts damaged. Unspecified tithes at bailiwick level from Uppsala regional archives have been used.
1716	Verifications in National Archives damaged. Damaged in Uppsala regional archives. The Orphanage information in the Stockholm city archives has been used.
1720	Verifications among the National Archives' county accounts damaged. Data from Uppsala regional archives at bailiwick level has been used.
1727	Verifications among the National Archives' county accounts missing. Uppsala regional archives' corresponding information badly damaged, the volume fell apart in bits. Information from the Orphanage in the Stockholm city archives has been used.

Data from Mora parish has mainly been collected from excerpts kindly provided by Professor Johan Söderberg. Söderberg has collected sin information from the National Archives' county accounts for Kopparberg county.

Measuring vessels' volume, measuring barrel

For this investigated period, Kopparberg county has throughout kappes and Swedish firkins as part units per barrel.¹³³

The barrel as measuring unit, measuring method, excess measures

The tithes sums that are shown come mainly from the tithes extract. The summation of parish tithes lists agrees with the extract. Excess measure is estimated on the total volume and shown separately. The database's volumes refer to levelled-off barrels.

Tithes system

Tithe lists in Kopparberg county are arranged according to tithes givers and not linked for example to the mantal of land registers. The peasant farmers are registered with the number of their stooks ("entire yearly growth"), the result of the test threshing and finally the crown's two-thirds of the tithes is estimated and accounted for.¹³⁴

The volume of oats is shown as a rule in the extract as "double oats" – i.e. the oats volumes halved. For some reason however, Västerdalarna's oats are not accounted for as double oats. In Västerbergslagen the oats are accounted for sometimes as single oats and sometimes as double oats – in the same extract and for the same year. In the database, this has been corrected and all oats volumes refer to "single oats".

The pea volumes are sometimes shown as with and without reductions for the parson's tertial. This has been corrected so that the pea volumes in the database are accounted for as whole tithes. Johan Söderberg has also used this method in his excerpts.

¹³³ Söderberg J. Excerpter. For the period 1680-1746, even the kappe was divided into eighths according to Söderberg and for the period 1747 onwards into eighteenth-parts per kappe. For the years I myself have excerpted, these divisions have however not been observed in the documents.

¹³⁴ Söderberg 1999, p. 117.

Fixed tithes settings

Kopparberg county is characterised by having been late out in the introduction of fixed tithes, and a large part of the county still had adjustable tithes towards the end of the 1700s. The table below summarises which parishes introduced fixed tithes and when that occurred.

Introduction of fixed tithes in Kopparberg county

Parish	From and including year
Folkärna, Grytnäs, Tuna beyond and above the bridge	1753
Ål	1755
Stora Skedvi	1760
By, Svärdsjö, Vika, Torsånger	1762
Söderbärke	1763
Grängesberg	1769
Hedemora and three parishes	1771
Sundborn	1772
Norrbärke	1773
Lima, Malung, Äppelbo, Järna, Nås and Floda	1775

Fixed tithes were implemented at the request of the peasant farmers and were to represent the average value of nine years of harvests.¹³⁵ The following parishes still had adjustable tithes in 1800: Garpenberg, Finsta Fjärding, Husby, Silvberg and Skärsjö, Säter, Gagnef, Bjursås, Leksand, Rättvik, Ore, Orsa, Mora, Vänjan and Älvdalen. Gustafs parish, founded in 1784 after having broken away from Tuna beyond the bridge, seems to have had fixed tithes right from the start and followed its mother parish which had fixed tithes from 1753. This is my assessment, since the tithes information in the extract lacks corresponding tithes lists, which the parishes that still gave tithes have.

Harvest estimates

As usual, it has also been important for Kopparberg county when estimating the harvest to add a supplement for farms exempt from paying tithes. For Kopparberg county mining districts, such harvest estimates tend to be particularly uncertain through the presence of mineworkers exempt from taxes to the crown. These had been freed from paying among other things Crown tithes since the time of Gustav II Adolf.¹³⁶ The mineworker farms that were exempt from tithes have been shown explicitly certain years in the investigated source material, but how many they were in other years cannot be immediately seen. Does the lack of information certain years mean that they were exempt these years, or have they just been left out without a trace in the tithes accounts? For the following years, observations on the mineworkers have been made in the source material:

Västerberglagen 1665, 1674, 1689

Kopparberg county 1665, 1666, 1668, 1690, 1691, 1698

¹³⁵ ”Som Åhls sockens inbyggare och hemmansbrukare genom ingifwan Skriffit den 2 Juni innewarande åhr enhälligen anhallit och begärt ? wiss Tionde sättning medh kronotionde uthgiämnande ... bevillias till undvikande af then muckna olägenhet med räkning och profning... effter Årsväxtens medium af nio åhrs wext sig bestiga til två tunnor korn, tiugufemb tunnor Bland, fyrttjo Tre Tunnor hafre dubbel, och femb Tunnor Erter....” RA, länsräkenskaper, verifikationer 1755.

¹³⁶ See under ”Bergsfrälse” in *Nordisk familjebok* (second edition, 1904)

Näsgård county 1671, 1674

Säter county 1671, 1674, 1691, 1718

A clarification of these issues would involve close investigations farm by farm which has not been possible within the framework for this project. Instead, preliminary supplements have been calculated with the same factors as for exempt farms used by Lennart Palm in his estimations for an earlier project for 1690.¹³⁷ The database's surest harvest estimates for Kopparberg county ought thus to be those for Öster- and Västerdalarna's bailiwicks, that lack mineworker farms.

In certain source material, the oats tithes were divided into two categories: "double" and "single" oats. In the database, I have counted "double" as numerically the same as unreduced tithes sums * 2, and "single" as equivalent to unreduced barrels. This makes it possible to compare and sum up oats volumes over county borders.

I have refrained generally from using peas in harvest estimates since the pea harvest is taxed in another way than by counting stooks. It is therefore not possible to make an independent estimate of the harvest in the same way as with grain. When the Orphanage duties are used for estimates I have based the estimates on their having been calculated as 1/40 of the entire tithes.

The result of the harvest estimates is shown graphically in the following diagram of the bailiwick level.

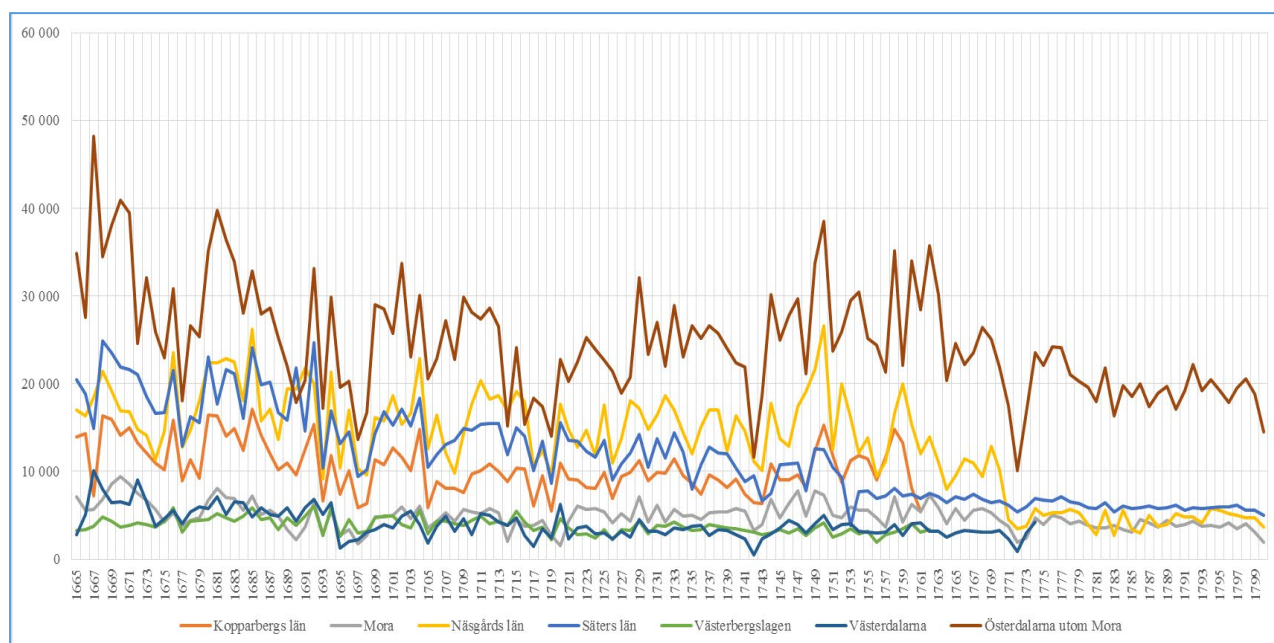
These are terminated when more than 20 % of the bailiwick's tithes are fixed, which happens according to the following table:

Introduction of fixed tithes in Kopparberg county's bailiwicks

Bailiwick	Fixed tithes from and including year
Kopparberg county	1762
Näsgård county	1762
Säter county	1753
Västerberg county	1763
Västerdalarna	1775
Österdalarna	-

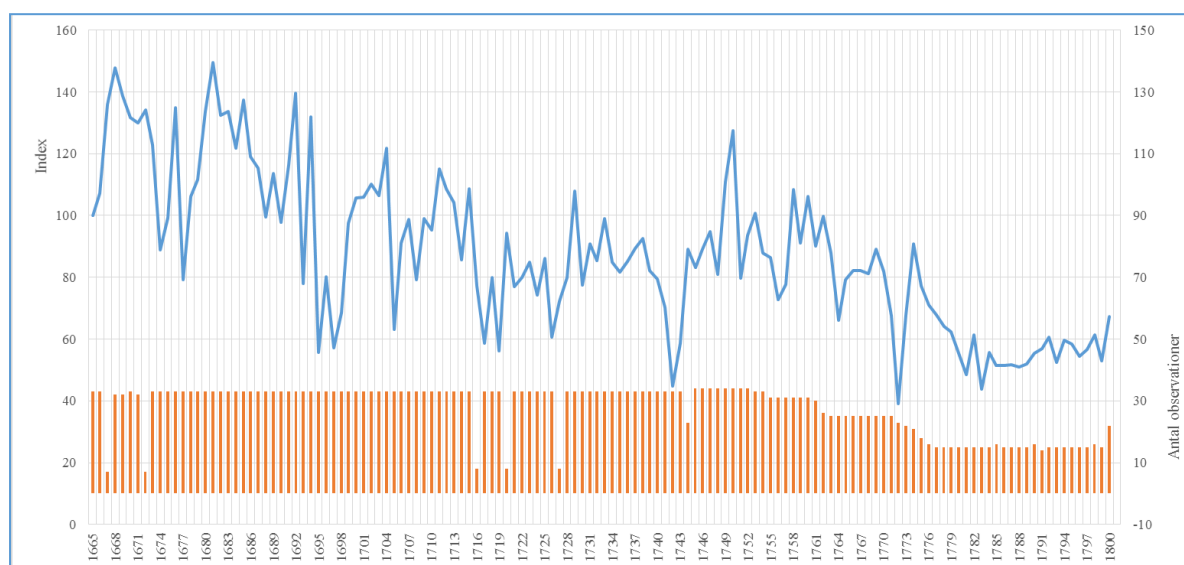
¹³⁷ Palm 2012.

Estimated harvests in Kopparberg county's bailiwicks 1665-1800 (barrels of reduced grain)



As usual here, besides harvest estimates in volumes, a harvest index has also been included in the database. The harvests and index are shown in the following diagram at bailiwick level, where Kopparberg's and Västerborslän's bailiwicks have mainly been assumed to have fixed tithes from and including 1761, Näsgrå's from and including 1770, Västerdalarna after 1774 and the others at least until 1800. Please note that the index has been calculated from a falling number of parishes with adjustable tithes, which is why it is probable that it is less representative for the county at the end of the investigation period.

Estimated harvests in Kopparberg county 1665-1800 (index 1665=100)



Other

For Mora parish, I have mainly used Johan Söderberg's excerpts. From 1759 however, I have made a small change in relation to these. Söderberg has mainly used the tithes lists' volumes, whereas I have used the extract volumes. The former's account is somewhat more thorough than the latter's. The extract's volumes for "mixed grain" also includes pea mixture, which Söderberg's "mixed grain" does not – his volumes are thus slightly lower here. I have kept to the extract's headings to keep more consistent to the source.

Estimated harvests in Kopparberg county 1665-1800 (reduced barrels; index 1665=100)

1665	100	33
1666	107	33
1667	136	7
1668	148	32
1669	139	32
1670	132	33
1671	130	32
1672	134	7
1673	123	33
1674	89	33
1675	99	33
1676	135	33
1677	79	33

1678	106	33
1679	112	33
1680	134	33
1681	149	33
1682	133	33
1683	134	33
1684	122	33
1685	137	33
1686	119	33
1687	115	33
1688	99	33
1689	114	33
1690	98	33

1691	116	33
1692	140	33
1693	78	33
1694	132	33
1695	56	33
1696	80	33
1697	57	33
1698	68	33
1699	98	33
1700	106	33
1701	106	33
1702	110	33
1703	107	33

1704	122	33
1705	63	33
1706	91	33
1707	99	33
1708	79	33
1709	99	33
1710	95	33
1711	115	33
1712	109	33
1713	104	33
1714	86	33
1715	109	33
1716	77	8
1717	59	33
1718	80	33
1719	56	33
1720	94	8
1721	77	33
1722	80	33
1723	85	33
1724	74	33
1725	86	33
1726	61	33
1727	72	8
1728	80	33
1729	108	33
1730	77	33
1731	91	33
1732	85	33
1733	99	33
1734	85	33
1735	82	33
1736	85	33
1737	89	33
1738	93	33
1739	82	33
1740	79	33
1741	70	33
1742	45	33
1743	59	33
1744	89	23
1745	83	34
1746	89	34
1747	95	34
1748	81	34
1749	111	34
1750	128	34
1751	80	34

1752	94	34
1753	101	33
1754	88	33
1755	86	31
1756	73	31
1757	78	31
1758	108	31
1759	91	31
1760	106	31
1761	90	30
1762	100	26
1763	88	25
1764	66	25
1765	79	25
1766	82	25
1767	82	25
1768	81	25
1769	89	25
1770	82	25
1771	68	25
1772	39	23
1773	68	22
1774	91	21
1775	77	18
1776	71	16
1777	68	15
1778	64	15
1779	62	15
1780	55	15
1781	49	15
1782	61	15
1783	44	15
1784	56	15
1785	51	16
1786	51	15
1787	52	15
1788	51	15
1789	52	15
1790	55	16
1791	57	14
1792	61	15
1793	52	15
1794	60	15
1795	58	15
1796	55	15
1797	57	15
1798	61	16
1799	53	15

1800	67	22
Average 1665-1800	91	

Variables in the database "Kopparbergs län"

Page "Grunddata"

År = Year

Landskap = Province

Län = County

Fögderi A = Fögderitillhörighet enligt källan Bailiwick A = bailiwick appurtenance according to source

Fögderi B = Österdalarna sammanslagna och Mora utbrutet = Bailiwick B = Österdalarna merged and Mora broken away

Socken A = Socknar enligt källmaterialet Parish A = parish according to source material

Socken B = Socknar som någon gång under undersökningsperioden varit delade sammanförda under ett gemensamt begrepp Parish B = parishes that at one time or other during the period investigated had been divided now merged under a common concept

Tionde råg decitunnor = Rye tithes in decibarrels

Tionde korn decitunnor = Barley tithes in decibarrels

Tionde ärtor decitunnor = Pea tithes in decibarrels

Tionde havre decitunnor = Oats tithes in decibarrels

Tionde vete decitunnor = Wheat tithes in decibarrels

Tionde blandsäd decitunnor = Mixed grain tithes in decibarrels

Tionde frusen råg decitunnor = Frozen rye tithes in decibarrels

Tionde fruset korn decitunnor = Frozen barley tithes in decibarrels

Tionde fruset blandsäd decitunnor = Frozen mixed grain tithes in decibarrels

Tionde fruset havre decitunnor = Frozen oats tithes in decibarrels

Tionde frusna ärtor decitunnor = Frozen pea tithes in decibarrels

Tionde ärtblandning decitunnor = Frozen mixed pea tithes in decibarrels

Tionde i spannmål (råg + korn) = decitunnor Mixed grain (rye and barley) tithes in decibarrels

Summa tionde i oreducerade decitunnor = Sum tithes in unreduced decibarrels

Summa tionde i oreducerade decitunnor (exkl. ärtor) = Sum tithes in unreduced decibarrels (excl. peas)

Summa tionde i ren stråsäd = Sum tithes in reduced straw grain

Bas för index 1665 tionde (socken B, fögderi B) = Base for index 1665 tithes (parish B, bailiwick B)

Index (1665=100) = Index (1665=100)

Beräknade skördar i decitunnor ren stråsäd = Estimated harvest in decibarrels reduced straw grain

Källa = Sources

Anmärkning = Remarks

Källnycklar

Johan Söderberg, Ekohist, Stockholms universitet, excerpter = Johan Söderbergs excerpter, Ekonomisk-historiska institutionen, Stockholms universitet

RA = Riksarkivet = central National archives, Stockholm

RA, Länsräkenskaper, Kopparbergs län = Riksarkivet, länsräkenskaper, Kopparbergs län

SSA = Stockholms stadsarkiv = Stockholm city archives

SSA, Barnhusavgiften * 40 = sums of tithes to Stockholm Orphanage, Stockholms barnhus, huvudböcker, Stockholms stadsarkiv, sums multiplied by 40

ULA = Uppsala landsarkiv = regional National archives, Uppsala

ULA = Kopparbergs län, Landskontoret = Kopparbergs län, landskontor, landsböcker or
verifikationer, Landsarkivet i Uppsala.

Småland, Västergötland and Dalsland

Lennart Andersson Palm

When planning this project, we intended to leave out these provinces, partly because they had been considered to have gained fixed tithes comparatively early on, and partly because they have suffered unusually large archival losses for our period. Despite this, a preliminary investigation has been made which proved of certain value. Among other things, it appeared that parts of these counties continued with harvest-dependent tithes for considerably longer than had been assumed.

If in the future “black-marked” source material in the National Archives in Stockholm and the Vadstena regional National Archives is made accessible for research, it will be possible to undertake closer and more complete harvest-dependent tithes series even at the parish level also for these extensive agricultural areas.

Administrative divisions

The province **Västergötland** at the end of the 1600s was divided into two counties, Skaraborg and Älvsborg. To the latter belonged also the province **Dalsland**. The province **Småland** was divided into Kalmar, Kronoberg and Jönköping counties. Jönköping and Kronoberg counties were for parts of the second half of the 1600s one county, Jönköping and Kronoberg county. In 1670-1673 the region of Kronoberg county was divided between Kalmar and Jönköping counties. Kronoberg county was restored and then in 1675-1679 also included the province **Blekinge** (except for Lister district). Before 1675 and 1680, Blekinge had belonged to Kristianstad county, but was transferred after having belonged to Kronoberg county to Kalmar county in 1681-1685. Only in 1686 did Blekinge become a county of its own.

Several districts in Småland belonged to varying counties during our period of investigation:

Allbo and *Kinnevald* belonged in 1670 to Kalmar county and 1671-1673 to Jönköping county. *Norrvidinge* belonged to Kalmar county in 1671-1673, and all three belonged otherwise to Kronoberg county. *Sunnerbo* belonged to Jönköping county in 1673 and *Konga* to Kalmar county. Both had previously belonged to Kronoberg county. *Uppvidinge*, that normally belonged to Kronoberg county, belonged in 1670-1673 to Kalmar county. *Östra district* belonged in 1665-1669 and 1674-1680 to Kronoberg county, otherwise to Jönköping county.

The province **Öland**, **part of Kalmar county**, is treated separately in the project, see separate chapter.

Västergötland's districts also changed county: *Askim*, *Sävedal* and *Östra Hising* (“Swedish Hisingen”) districts belonged until 1679 to Älvsborg county but were transferred thereafter for good to Göteborg and Bohus county. Dalsland belonged temporarily in 1680 also to the latter county as did the old Västergötland districts of *Vättle* and half of *Väne*. These two districts belonged otherwise, both before and after 1680, to Älvsborg county.

However, the Västergötland and Småland administrative divisions were also complicated since they of all the Swedish national provinces during the seventeenth century had most estates belonging to counts and barons. This splintered much of the fiscal administration in the two provinces.¹³⁸ In 1665 the following *shires* existed: Läckö, Bogesund, Mariestad and Skövde, as well as Visingsborg, Södermöre, Västervik and Stegeholm (the city shires Mariestad and Skövde had been revoked to the crown as early as 1656). Peasant farms in Halland were also included in Bogesund at this time, and in Visingsborg also peasant farms in **Östergötland** province. Västervik and Stegeholm was the name of a shared shire; it belonged to the crown from 1675.

¹³⁸ As far as the extraordinarily complicated issue concerning the fiscal administration and for example collection of revenues in the shires and baronies, see first and foremost Swedlund 1936, p. 201–245 and also Palm 1993, p. 230.

In 1665, there were also a number of *baronies* in these provinces: Öresten, Orreholmen, Bergkvara, Kronobäck, Lundholmen, Eksjö, Härlunda, Kronoberg and Virestad. Öresten and Kronobäck was the name of a shared barony. At this time, only the peasant farms in Älvsborg county were included (previously, peasant farms in Kalmar county had also been included). Orreholmen is sometimes called Orreholm. Bergkvara was called Nya Bergkvara from 1645. In Dalsland there was the Älvkarleby och Dalaborg barony.

In 1680, it was decided that all the remaining shires and baronies were to belong to the crown, and this happened during the following years.

Source materials

As will become clear, much on the tithes system in the two provinces is still vague, partly depending on great archival losses not least for Älvsborg county, that lost its entire county government archives in the fire in Vänersborg in 1834. The county's account copies for the last decades of the 1600s have also been lost almost completely through fire in the central National Archives.

That the many shires and baronies sometimes took up tithes means that source materials are spread out over several non-government archives. Those archives have only partly been investigated in this project. The accounts of the tithes information has on account of all this been made fairly schematically for the three provinces and more detailed investigations have been left to future research.

For the period 1665-1680, Lotta Leijonhufvud's county-wise series of tithes excerpts from the National Archives, produced for her thesis, have been used.¹³⁹ In her thesis, she has complemented the material for sometimes missing district information through various estimates. My review here has for the sake of simplicity kept to her complementary information and left out her supplements on manors etc.

For the time after 1680, and years for which Leijonhufvud had no county accounts, I have collected bailiwick-level information from the Vadstena Soldiers' home accounts in the War Archives.¹⁴⁰ The Soldiers' home was to have one-fortieth of the crown's tithes as described in the introduction to this book. In the database, the total Crown tithes have been estimated through multiplication of the Soldiers' home barrel by 40, based on the assumption that this duty had been calculated according to valid statutes.

Where the source material's tithes are unspecified concerning type of grain, as was normal in these provinces, I have interpreted it as being so-called reduced grain.

Measuring vessels' volume, measuring barrel

Leijonhufvud's accounts for tithes are given in cubic metres. These are founded on the assumption of locally varying barrel volumes. In order to avoid a convoluted discussion about these volumes, I have recalculated the cubic metre figures based on her presumed barrel volumes to unspecified "barrels".

In Småland and Västergötland, tithes are shown in barrels, *skäppas* and Swedish pottles. When only *skäppas* are mentioned in some of the source materials, it is unclear how many of these there were to a barrel. The traditional number of *skäppas* per barrels was 6, but 5 and 4 also occurred around 1700. Uncertainty in a few cases has been noted in the database's remarks column.

The barrel as measuring unit, measuring method, excess measures

No investigation has been carried out here about whether the figures quoted refer to barrels with excess measure, levelled-off barrels or perhaps even levelled-off barrels reduced to barrels with extra

¹³⁹ Leijonhufvud 2001, p. 265 ff. One exception is the tithes for 1671 that I re-estimated according to the quota for three bailiwicks between 1670 and 1671, the latter year's information then gathered from Kalmar county's county accounts office, "avkortningsbok" for 1671, VALA.

¹⁴⁰ Krigskollegium, krigsmanshuskontoret, huvudböcker.KrA, now part of the central National Archives.

measure. A reasonable assumption is however that the information in this respect is homogenous within each respective county.

Tithes systems

These have not been investigated in more detail since the provinces in general had only had harvest-dependant tithes for a small number of years at the beginning of our period of investigation. In the whole region, by all accounts the crown's proportion of the tithes has been the usual in the country, 2/3 of the entire tithes. In 1687, certain systems were introduced however to ameliorate the fixed tithes in Jönköping and Kronoberg counties by among other things putting aside so-called reserve grain, but it **is still unclear what this was and whether this came to be valid also for the parishes** that for a time continued with harvest-dependent tithes.¹⁴¹

Fixed tithes settings¹⁴²

Jönköping county

For Jönköping and Kronoberg counties, fixed tithes were introduced in 1686, based on acreage and type of soil. This method meant that tithes were linked to the seed and type of soil.¹⁴³ However, even earlier, the county's shires and baronies had had fixed tithes.¹⁴⁴ Some parishes insisted however on keeping harvest-dependent tithes for a time, at least until and including 1690. The following parishes in Norra and Södra Vedbo districts stood outside the 1686 fixed tithes setting: Edshult, Säby, Askeryd, Hässelby, Kråkshult, Bellö, Hult, Flisby and Solberga.¹⁴⁵ In the database, the end limit for the county's tithes series was set at 1686.

Kronoberg county

Fixed tithes setting took place in Kronoberg county in 1686, but the county's shires and baronies had had fixed tithes even earlier than that (see above). The method at the 1686 tithes setting was the same as for Jönköping county. A number of parishes here too retained for a time the old harvest-dependent system. In 1690, two parishes in Uppvidinge, two in Konga and about half of Sunnerbo district still had harvest-dependent tithes. The parishes were Älgshult, Algutsboda, Hemmesjö, Tegnaby, Agunnaryd, Pjätteryd, Traryd, Markaryd, Hinnaryd, Annerstad, Nöttja, Angelstad, Hamneda and Södra Ljunga.¹⁴⁷ The database's series for the county also ends here with the year 1686.

Kalmar county

Södra Møre, Tunalän as well as Norra and Södra Tjust districts transferred to fixed tithes in 1686, as did Aspeländ district, in the latter case measured and checked in 1695.¹⁴⁸ In 1690, the following

¹⁴¹ Rabenius 1853, p. 79, n. 5.

¹⁴² See more detail in Palm, *Sverige 1690. Åkerbruk, boskapskötsel, skog, befolkning*, Göteborg, version September 2012.

¹⁴³ Rabenius 1853, p. 70; concerning the method see Häreddsskrivarens i Göteborg fögderi arkiv, volym E I:9, GLA.

¹⁴⁴ Jan Eric Almquist 1917, p. 216 ff. and Rabenius 1853, p. 70 quote the contract between the aristocracy and the peasants about the fixed tithes setting in Jönköping and Kronoberg counties of 15 July 1686, in which it was decided that the shires' and baronies' *old contracts* should remain unchanged. This means that fixed tithes had already occurred in certain places before 1686.

¹⁴⁵ For these in the 1690 tithes list (among Jönköping's county accounts' verifications in RA) are shown test threshing, estimated "Yearly growth" and "measurment". Corresponding information is missing for parishes with fixed tithes in 1690.

¹⁴⁷ The situation emerges from notes in the county accounts' summary over tithes in 1690, RA.

¹⁴⁸ For Tjust district the year for tithes setting emerges in the preamble to the tithes lists in Länsräkenskaper för Kalmar län, verifikationer 1727, RA; for other districts of those mentioned above in the Vadstena regional National Archives, where however one of the sets of lists for Aspeländ district is undated but stylistically etc. can be attached to other lists with stated year 1686.

parts of the county seemed still to have harvest-dependent tithes: the parishes Fagerhult, Fliseryd, Högsby, Kråksmåla, Mönsterås and Ålem in Handbörd and Stranda districts that were given fixed tithes first in 1699; and the parishes Dörby, Förlösa, Kalmar's **country parish** and Kläckeberga in Norra Møre district that agreed to the contract in 1698. Sevede district, with the exception of Pelarne parish whose tithes were agreed as early as 1686, was given fixed tithes in 1691. The database's latest limit for Kalmar county has been set in 1686. Special conditions were valid on Öland, a part of Kalmar county, see separate chapter.

Skaraborg county

When Skaraborg county as a whole was given fixed tithes is still uncertain. The county government was unsure even in the 1730s about the exact date for setting fixed tithes, but tithes were regarded as fixed at the latest in the 1690s.¹⁴⁹ For shires and baronies, fixed tithes settings happened early on by all accounts.¹⁵⁰

From Kålland district, old men certified in an investigation in 1780 that the 1680 cadastre (sic!) shows that the Crown tithes then were "set for peasant farms": from Järpås and Slädene parishes, tithes were said to have been fixed for "over a hundred years". From Husaby parish in Kinnefjärding district they are asserted to have been fixed from and including 1684. One rather puzzling piece of information from Viste district asserts that they had had fixed tithes for "all of one hundred years", but that the county governor Thord Bonde's contract "through peril or wrongdoing has been lost" (Tengene parish). Thord Bonde was county governor there in 1660-1668. A further discrepant piece of information comes from Udenäs parish in Vadsbo district: fixed tithes are supposed to have been introduced there "... in the 1690s in Thor Bonde's days...".¹⁵¹ This probably refers again to Thord Bonde, who had already died however in 1683. This information may at best be interpreted as that fixed tithes settings in Skaraborg county occurred at different times.

Surer information on how and about when tithes setting in the county had been started seems to have been found in some odd documents in the Skaraborg county accounts office's archives. By all accounts, the county government had asked to be sent documents from neighbouring counties to get some idea of how a fixed tithes setting might be implemented. First and foremost among the documents is a tableau of what seems to be the fixed tithes setting in *Älvsborg* county where an average of tithes for a poor, a mediocre and an abundant year was used (see more about this in the following on *Älvsborg* county). Most of the documents are dated at the end of 1680.¹⁵³

A further indication is given by the accounts for Mariestad Cathedral that received tithes from Bällefors and Amnehärad parishes (in Vadsbo district). In 1674, 1684 and 1687, about 169 skäppas from Bällefors and 143 from Amnehärad are accounted for there yearly. However in 1688 there is a change and the following notice has been added "... after tithes list, value and agreed contract", after which the sums are about 171 and 134 respectively for the years 1690, 1691 and 1693. The last-named year, an "annually agreed contract" is mentioned in good times and bad.¹⁵⁴

Any eventual correspondence etc. in the Kammarkollegiet' and the Vadstena Soldiers' home's archives might perhaps be able to provide more detailed information on the Skaraborg tithes system at various points in time, but have not been possible to investigate within the framework of this project. In the database, the limit forward for the possibility of harvest-dependent tithes was set at 1680.

¹⁴⁹ Herlitz 1974, p. 237 n. 3.

¹⁵⁰ Rabenius 1853, p. 70; Rydin 1882, p. 97.

¹⁵¹ Skaraborgs landskontor, volym GXVIe:1, GLA.

¹⁵³ Skaraborgs läns landskontor, volym GVe:1, GLA.

¹⁵⁴ Mariestads domkyrkoförsamling, volym LI:1, GLA.

Älvsborg county

“Harvest-dependent tithes” is a concept that must be taken with great reservation when used for Älvsborg county during the second half of the 1600s. Parts of the county were, as has been mentioned, sometimes exempt from tithes to the crown (e.g. Öresten barony 1665).¹⁵⁵ Besides, the shires introduced fixed tithes early on.¹⁵⁶ Thus, Visingsborg shire introduced fixed tithes, at least for its peasants in the Älvsborg district of Mark, in 1647.¹⁵⁷ In the same parish, certain peasant farmers could thereby have fixed and others harvest-dependent tithes at the same time.¹⁵⁸

One example of another kind of flexibility emerged in Närunga parish, Kulling district, where in the tithes list in 1670 it is mentioned that it was agreed to give the same tithes as in 1669, the peasants having had to plough the grain back into the ground on account of bad harvest and thus being unable to stack it.¹⁵⁹

How and exactly when tithes setting occurred is still partly unclear. A couple of documents, found unexpectedly in the neighbouring county Skaraborg’s archives, speak for fixed tithes already having been introduced at the beginning of the 1680s. An undated tableau there for *Älvsborg county* contributes parish-wise tithes information for one year with more abundant, one with mediocre and one with poorer yearly growth.¹⁶¹ This document is probably from 1681 or somewhat later.¹⁶² These are probably copies of some working material from Älvsborg’s fixed tithes setting project. Fixed tithes were in that case estimated from some kind of average assessment for the three years. In Kungsäter parish’s tithes list for 1680, there is a note that indicates that tithes there were linked to the tax assessment unit, the mantal.¹⁶³ Disputes in the district court in Mark in 1713 state in contradiction that a contract, uncertain if this was with the crown or the parson, had been agreed in “1681” and that fixed tithes had existed in “More than 20 years”.¹⁶⁴

Several parishes or even districts possibly continued for a time to have harvest-dependent tithes. This is possibly true for Askim, Sävedal and Östra Hising districts, as has emerged in the section on Bohuslän above. From and including 1680 they came to belong to Göteborg and Bohus county, up until fixed tithes were set there in 1694. Uncertainties remain also for Dalsland. From the Dalsland bailiwick’s district scribe’s accounts, it emerges that tithes in 1689 had been collected according to the clergy’s lists. In 1691 on the other hand, notes about the clergy’s lists have been erased and instead additions have been made according to “agreed accord”. The following years were recorded the whole time “according to agreement made with the peasantry about a certain amount in good times and bad” and the sums are the same as those in the 1691 list. For 1690, information is missing in the crown accounts.¹⁶⁵ Fixed tithes would thus have been introduced here at the latest in 1691. However, this interpretation is uncertain.

Possible correspondence etc. in the Kammarkollegiet’s (in the central National Archives) and Vadstena Soldiers’ home’s archives might perhaps be able to provide more detailed information about Älvsborg’s tithes system at different points in time, but have not been possible to investigate

¹⁵⁵ See Forsgrén 1885.

¹⁵⁶ Rabenius 1853, p. 70; Rydin 1882, p. 97.

¹⁵⁷ Rabenius 1853, p. 70; Rydin 1882, p. 97; Forsgrén 1885. Palm 1993 p. 242 f.

¹⁵⁸ Palm 1993 p. 242 f.

¹⁵⁹ Länsräkenskaper Älvsborgs län, verifikation 1670, RA.

¹⁶¹ Skaraborgs landskontor, volym GVe:1, GLA.

¹⁶² For this, there is evidence that the regimental commander for the Västgöta-Dal regiment named therein was commander in 1680-1691 and that Vassända parish, that belonged to Göteborg and Bohus county in 1680, is mentioned. Tithes from Bogesund, and Öresten shires and baronies as with the shire “in Dal” (Dalsland) are put at the disposition of the crown in the tableau mentioned here. The collection of such tithes had been a significant issue at the 1675 Parliamentary meeting (Swedlund 1936, p. 262). Öresten barony’s tithes had been returned to the state even before 1654 (Swedlund appendix IIb with comments).

¹⁶³ Palm 1993 p. 232 with n. 94.

¹⁶⁴ Palm 1993, p. 242 ff.

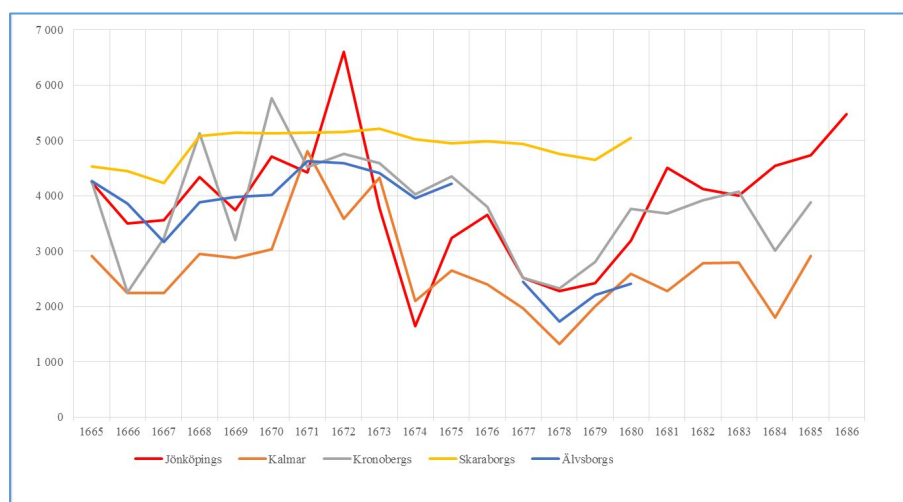
¹⁶⁵ Häradsskrivaren i Dalsland, räknenskaper respective years, GLA.

within the framework of this project. In the database, the forward limit for possible harvest-dependent tithes in Älvsborg county was set at 1680.

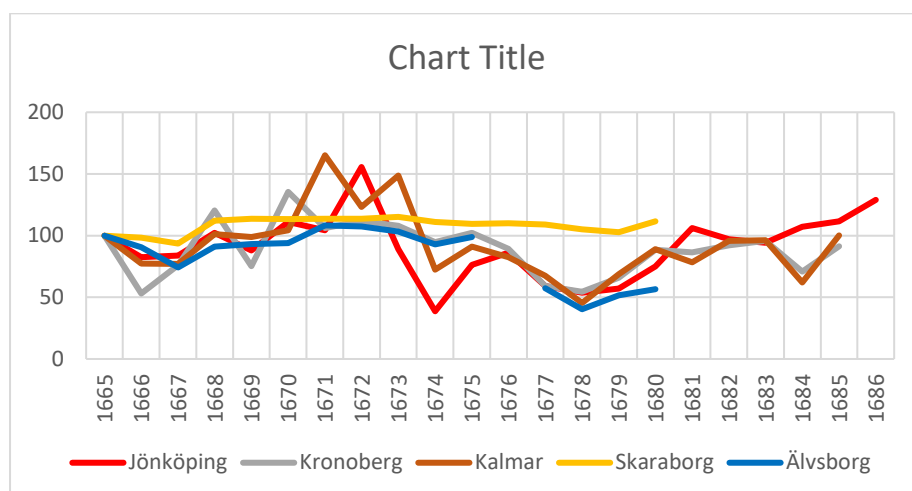
Tithes series and harvest estimates

In the database, rough provisional estimates have been made of these five counties' tithes based on Leijonhufvud's excerpts. The estimates have been limited to the county level. For gaps in this material and some further years after 1680 when her investigation ended, the estimates have first and foremost been made from the Soldiers' home barrel that has been assumed to correspond to 1/40 of the crown's tithes (before customary reductions). In Leijonhufvud's estimates and in the Soldiers' home information for Skaraborg are not included the tithes for the Läckö bailiwick Visingsborg shire. The database's calculations for Kalmar county do not include Öland. The database's forward limit has been set to 1680 for Västergötland and 1686 for Småland, when fixed tithes had become these counties' normal system. Tithes development is shown in the following diagram (information is missing for Älvsborg county in 1676):

Tithes in Småland and Västergötland per county from and including 1665 (barrels reduced grain)



Tithes in Småland and Västergötland per county from and including 1665 (Index 1665 = 100)



The harvests thus estimated do not include the parts of Skaraborg and Kalmar counties not named here, nor the towns.

Archival losses, changing administrative divisions, uncertainty concerning the tithes system as well as the various skäppa sizes make the database's tithes series uncertain. The diagram above should only be seen as a rough indication of the development. A couple of observations are however in place: the very stable curve for Skaraborg county reveals that the greater part of this county must in practice have had fixed tithes long before the 1680s. The violent oscillations for Jönköping county in the 1670s may possibly indicate faults in the source data or the interpretation of these.

A very rough estimate of harvests may be made using the following method:

- 1) multiply the tithes by 15
- 2) multiply the sum attained under 1) by 1,1 to compensate for assumed underestimations when measuring the tithes etc.
- 3) multiply the sum of the calculations under 1) and 2) per county by the following factors¹⁶⁶ that are a very rounded-off upward estimation of the tithes for tithes-exempt manors and vicarages.

County	Factor
Jönköping county	1.20
Kalmar county excluding Öland	1.10
Kronoberg county	1.20
Skaraborg county excluding Läckö and Visingsborg	1.10
Älvsborg county	1.10

Crises

The investigation's character of overview has not permitted any more detailed observations on the source materials. In the literature, the following years during the investigation period have been said to be years of need at least in Dalsland (part of Älvsborg county): 1666, 1672, 1675, 1686, 1689, 1690, 1693.¹⁶⁷

¹⁶⁶ Builds on preliminary work for Palm's *Sverige 1690. Åkerbruk, boskapsskötsel, skog, befolkning*, Göteborg, version september 2012.

¹⁶⁷ Anders Lignell, *Beskrifning öfver grefskapet Dal*, 1965 edition, p. 268.

Tithes index for five counties some years 1665-1686 (1665=100)

Year	Jönköping	Kronoberg	Kalmar	Skaraborg	Älvsborg
1665	100	100	100	100	100
1666	82	53	77	98	90
1667	84	76	77	94	74
1668	102	120	101	112	91
1669	88	75	99	114	93
1670	111	135	104	113	94
1671	104	106	165	114	108
1672	156	112	123	114	107
1673	89	108	149	115	103
1674	39	95	72	111	93
1675	76	102	91	109	99
1676	86	89	83	110	
1677	59	59	67	109	57
1678	54	55	45	105	40
1679	57	66	69	103	52
1680	75	88	89	112	57
1681	106	87	78		
1682	97	92	96		
1683	94	96	96		
1684	107	71	62		
1685	112	91	100		
1686	129				

Variables in the database "Småland och Västergötland"

The file "Grunddata"

År = Year

Socken = Parish

Härad = District

Fögderi = Bailiwick

Landskap = Province

Län (enligt källmaterialet) = county (according to the source material)

Län i Västergötland, landskap i Småland = County in Västergötland, province in Småland

Tionde i decitunnor ren stråsäd (före införandet av fast tionde) = Tithes in decibarrels before introduction of fixed tithes

Källa = Source

Anmärkning = Remarks

Key to sources

Lotta Leijonhufvud's excerpts = for sources see Leijonhufvud 2001

KrA, krigsmanshusskåppor * 40 = Krigskollegium, Krigsmanshuskontoret, huvudböcker, accounts for the Soldiers' home's barrels, central National Archives, Krigsarkivet, barrels multiplied by 40.

KrA = Krigsarkivet = War archives, now part of central National archives

Södermanland

Lotta Leijonhufvud

Administrative divisions

The county's precursors are the three castle counties *Nyköping county*, *Gripsholm county* and *Eskilstuna(hus)*. These were merged together finally in 1719 under a shared county government with Nyköping as the governor's residence town. Nyköping county alone was as an archivist called it Södermanland county, but was thus only a part of what later became the greater county of Södermanland.

Nyköpings län is never found as bailiwick designation in the source material but is divided into the two bailiwicks "Oppunda & Villåttinge districts" and "Jönåker, Rönö & Hölebo districts".

Eskilstuna län, including Öster- and Västerrekerne districts as well as the towns Eskilstuna, Karl Gustafs stad and Torshälla were included in 1633-1718 in *Livgedingets* Södermanland section, with partly their own county accounts among the usual county's county accounts in the county accounts office in the National Archives, and partly an archive-like equivalent to the ordinary county government's accounts in the county accounts office, but in contrast to the county accounts offices, not situated in the regional National archives but also in the central National Archives in Stockholm under the archival designation *Hedvig Eleonoras livgeding (life estate)*, Guvernementskontoret. The life estate's suite of accounts among the county accounts starts in 1661. From and including 1719, the county was subordinate to Södermanland county.

Gripsholm county also belonged to the Södermanland section of the life estate in 1633-1718. It consisted of Åker, Selebo and Daga districts as well as the parishes Taxinge, Ytter- and Överenhörna in Öknebo district (later merged with Selebo district, Taxinge now and then to Åker district), Mariefred and Strängnäs towns. Gripsholm county was later divided and Selebo district became a bailiwick of its own, sometimes called *Räfsnäs county*.¹⁶⁸ From and including 1719, this county was subordinate to Södermanland county.

Södertörn, i.e. Svartlösa, Sotholm and Öknebo districts, were included in Nyköping county in 1689-1719. In this project, Södertörn is accounted for during the entire period of investigation in the chapter on Uppsala and Stockholm county.

Some administrative irregularities have been observed: one part of Vrena church parish was situated in Villåttingen district, but the whole parish's tithes were accounted for in Oppunda district according to the cadastre but their entire tithes are accounted for in Finspånga county bailiwick in Östergötland county (whither its tithes have been conveyed in this project).¹⁶⁹

Torshälla county congregation was also called Hällby.

The following parishes are sometimes counted as belonging to the province of Södermanland, but in 1913 they belonged to Stockholm county: Muskö, Nacka, Nämndö, Ornö, Salem, Sorunda, Södertälje, Torö, Turlinge, Tveta, Tyresö, Utö, Vårdinge, Västerhaninge, Ytterjärna, Ösmo, Österhaninge, Östertälje and Överjärna. Kvarsebo has been registered under Östergötland county.

Gripsholm and Räfsnäs counties are sometimes accounted for separately, sometimes together. In order for these two counties to be investigated as a unit, two bailiwick divisions have been created in the database, one A following the source material's indelning, and one modified, B, in which Gripsholm and Räfsnäs are registered under the common heading "Gripsholm och Räfsnäs".

In the database, Södermanland consists of the following 92 parishes and country congregations: *Oppunda district*: Vingåker, Österåker, Julita, Malm, Lerbo, Floda, Skyllinge, Vadsbro, Blacksta, Huseby (Oppunda), Bettna and Vrena. *Villåttinge district*: Heligsta, Hultinge,

¹⁶⁸ See e.g. Länsstyrelsen i Södermanlands län, landskontoret, verifikationer 1726, ULA.

¹⁶⁹ Lagerstedt 1973, p. 19.

Duncker, Malma, Årdala, Forsa, Medlösa and Flen. *Jönåkers district*: Lunda, Kila, Björkvik, Halla, Nykyrka, Stigtompta, Bärbo and St Nicolai. *Rönö district*: Lid, Ripsa, Runtuna, Ludgo, Spelvik, Tystberga, Bälinge, Torsåker, Lestringe, Sättersta, Bogesta, Råby (Rönö härad), Svärta and Helgona. *Hölebo district*: Hölö, Mörkö, Västerljung, Vagnhärad, Trosa, Berghamra Tuna and Tuna Bergslag. Tuna Bergslag (now Tunaberg) is included in Tuna parish until 1678. *Eskilstuna county* (Öster- and Västerrekarna): Jäder, Kjula, Vallby, Fors, Kloster (with Eskilstuna town), Barva, Sundby, Hammarby, Stenkvista, Ärla, Huseby-Rekarna, Näshulta, Torshälla town and parish, Gillberga, Lista, Tumbo, Råby-Rekarna, Öja, and Västermo. *Gripsholm county*: Åker, Länna, Härad, Vansö, Fogdö, Helgarö, Dillnäs, Strängnäs town and country **congregation**, Gåsinge, Frustuna, Kattnäs, Björlunda and Gryt. *Räfsnäs county* (Selebo district) is included in Gripsholm county until 1707 and includes the parishes: Ytterselö, Kärnbo, Mariefred, Taxinge, Toresund, Överselö, Aspö, Över- and Ytterenhörna.

Source materials

The archival material comes from several **provenances**. In the National Archives, the stock of county accounts for Södermanland and the accounts for the Life estate are badly damaged. In the regional National archives in Uppsala on the other hand, the Södermanland county government's county accounts office's documents are generally in good condition. The books exist from 1665 onwards, containing summaries of incomes and costs, with the tithes extract in most cases at the end of each book. The verifications start in 1684 (apart from the years before 1665).

When the Life estate's county accounts have been badly damaged or are missing, so they have not been usable as sources, it has not been possible to gain complete information for Gripsholm and Eskilstuna counties with the help of Södermanland's county accounts office's accounts, since in contrast to the Life estate's areas in Västmanland, they are not included in the permanent county accounts office's accounts in these two counties.

Years and regions in Södermanland for which information is missing

(LR = Länsräkenskaperna [County accounts]; LivG = Livgedingets arkiv [Life estate's archives])

Year	Region/Parish	Cause
1665	Gripsholm & Eskilstuna counties	Missing
1666	Gripsholm & Eskilstuna counties	Missing
1667-1675	Parishes in Gripsholm county bequeathed to the crown	Bequeathed. See following table
1680	Jäder, Kjula, Vallby, Fors, Kloster, Barva, Sundby, Hammarby	Extract missing for Eskilstuna county. Tithes lists start first with Stenkvista parish. Pages missing in verifications. LR. LivG.
1682	Gripsholm county	LR, LivG. Verification starts first on p. 69 with "Bequeathed estate" (in Gripsholm county)... This indicates that the tithes extract and lists are missing, since they usually come first of all.
1683	Gripsholms & Eskilstuna counties	Black-marked
1684	Gripsholms & Eskilstuna counties	Missing
1685	Åkers, Gåsinge, Frustuna, Kattnäs, Björnlunda, Gryt, Övre & Yttre Enhörna	Missing in LR, LivG. No extract. The reduction book starts on p. 8 with Länna parish. Acreage always comes first.
1691	Eskilstuna county	Missing
1699	Kjula, Vallby, Fors	LR, LivG: Volume in very bad condition. Extract missing and all tithes lists stuck together, for e.g. Fors parish illegible. Kjula's and Vallby's tithes lists not found.
1702	Gripsholm & Eskilstuna counties	LR, LivG: Black-marked volume.
1703	Gripsholm county	LR, LivG. Badle fire-damaged volumes. Could find neither extract nor lists for Gripsholm county.
1708-1709	Gåsinge, Frustuna, Kattnäs, Gryt, Björnlunda	Have fixed tithes. From extract and in these there is nothing to indicate that tithes are fixed. Since the sums for these are however exact, I assume that they have some form of agreement.
1709	Åker, Länna, Härad, Vansö, Fogdö, Helgarö, Dillnäs, Strängnäs	Extract missing. The extant tithes lists only refer to the parishes kept by the crown. Some parishes under Räfsnäs county have information (see next table).
1715	Gripsholms county, granted parishes	In the extract for the parishes kept by the crown, it is stated that no tithes lists from the bequeathed parishes have been received. For Åker, Länna and Härad parishes, "Capellanens" tertial lists have been possible to use, however not the list for Dillnäs which is not added up.
1717	Räfsnäs county	No information has been found, the material is partially damaged by mould and difficult to work on.
1719		Missing
1721	Gripsholm county	Only book with summary of incomes and costs, RA.
1725		Missing
1730	Södermanland county	The entire county now has fixed tithes, except the towns. Their tithes information has been left out.

In Gripsholm county, the following parishes' tithes in their entirety were bequeathed until and including 1675. It has not been possible within the framework of this project to search for and investigate possible preserved archives of recipients.

Tithes bequeathed to the crown up until and including 1675 in Gripsholm county

Parish	Recipient
Åker	Strängnäs hospital
Länna	Strängnäs hospital
Härad	Strängnäs hospital
Ytterselö	Strängnäs hospital
Vansö	The bishop
Fogdö	The bishop
Helgarö	The bishop
Kärnbo with Mariefred town	State schools
Taxinge	State schools
Dillnäs	State schools
Toresund	State schools
Överselö	The provost
Aspö	The provost
Strängnäs	Teachers

The Sörmland Crown tithes accounts we have been able to use thus display many gaps which is why bailiwick information from the accounts of the county's duties to the Stockholm Orphanage in the Stockholm city archives have had to fill in the gaps. Normally, these details included a 40th part of the unreduced Crown tithes, but in the tithes extract for Gripsholm and Eskilstuna it emerges that at least until and including 1695, the duties were estimated *after* "the customary reductions" (see the introductory chapter in this report), which in reality was against the statutes' wording. The estimation of the total bailiwick tithes has therefore been made with the help of the following formula:

$$40 * (((\text{customary reductions} - \text{the stated Orphanage barrel}) / 40) + \text{the stated Orphanage barrel})$$

For Eskilstuna bailiwick, this formula gave (the customary reductions then collected from the 1695 extract) for:

$$1683 \ 40 * (((316.75 - 13.1575) / 40) + 13.1575) = 829.875$$

$$1684 \ 40 * (((316.75 - 6.22) / 40) + 6.22) = 559.33$$

For Gripsholm bailiwick it gave:

$$1683 \ 40 * (((402.5 - 14.76) / 40) + 14.76) = 978.14$$

$$1684 \ 40 * (((402.5 - 10.375) / 40) + 10.375) = 807.125$$

Judging from different extracts, the two bailiwicks began to count 40th parts in the normal way some time between 1695 and 1698.

Tithes system

With the exception of the year 1680, tithes information from the former Nyköping county, southern Södermanland, have been collected from extracts in the books with a summary of incomes and costs,

mainly from the county government's county accounts office archives in the Uppsala regional National archives since Södermanland's county accounts in the central State Archives are severely damaged. In the latter's verifications for 1680, the tithes lists show what each tithes payer gave in grain, but no information about the counting of stooks and/or/ test threshing. The accounts and extracts "run according to the clergy's signed and sealed lists" which does not say very much since the phrase sometimes also exists in the lists of fixed tithes.

I draw the conclusion that tithes in Södermanland were adjustable until and including 1681. Mainly the following speaks for this: upon comparison of the quota standard deviation/ average value for tithes during the period 1665-1681, this is shown to be 0.273 for the 49 parishes included in Nyköping county. This must be compared with the same quota for 61 parishes in Västmanland county which is 0.268. i.e. the relative yearly variations in Västmanland county, that we know had adjustable tithes with stook counting and test threshing, were somewhat less than for Nyköping county. This implies strongly that even Nyköping county had adjustable tithes according to harvest. As is shown in the section on Västmanland further on, it is possible that even fixed tithes may display variations between years, although it seems unlikely that Södermanland had fixed tithes before 1682.

For the Life estate parts of Södermanland, it emerges from the extract from Gripsholm county that tithes were adjustable in 1729, since the headings in the extract are "The whole yearly growth according to the sheaves", "test" (i.e. they had test threshing of the grain stooks) and "10th part of the yearly growth after the tertial has been withdrawn". In 1730 this was changed and the heading stated in short "After taxation", and the only thing to be shown was a combined grain sum. For Södermanland, the crown's tithes amounted to 2/3, since the headings in the extract are "tithes for whole yearly growth after Tertial has been withdrawn".

Fixed tithes settings

Former Nyköping county, i.e. Villåttinge, Oppunda, Jönåker, Rönö and Hölebo districts were all given fixed tithes – and all parishes at the same time – as early as 1682. This emerges from the book with the summary of incomes and costs for 1682 that notes that "Main collection made according to the peasantry's concession at the permanent court in (1)682, to give a certain quantity ..." and also from the same book for 1683 in which it is written that "The main collection runs according to the tithes lists' contents that have been set up at the court for year 1682 that the peasantry have out of certain tithes etc. etc. ..." The grain volumes are thereafter constant from year to year, except when a general revision occurred (as in e.g. 1698). In contrast to for example Västmanland and Kopparberg counties, I have been unable to find any notices in Södermanland about with which method fixed tithes were decided. My analysis shows moreover that of the 48 parishes¹⁷⁰, the majority, that is 29 parishes were given significantly higher fixed tithes than the amount they had previously paid in average value in tithes for the period 1665-1681. No parish was given significantly lower fixed tithes than its average tithes.

In the rest of Södermanland, fixed tithes were set in 1730, which emerges from the notes "After taxation" in the extract for that year.

The barrel as measuring unit, measuring method, excess measures

With the exception of 1680, tithes volumes from Södermanland are taken from the extract. I assume that these are expressed in levelled-off measures of 32 kappes per barrel. The addition of the parishes within the bailiwicks totals 32 kappes, which indicates accounting in levelled-off barrels.

Measuring vessels' volume, measuring barrel

¹⁷⁰ Tuna parish was divided into Tuna and Bergslaget Tuna in 1679, only 4 years before fixed tithes were introduced.

Standard barrels of 8 Swedish firkins or 32 kappes are used throughout. I have not noticed any deviations from this.

Harvest estimates

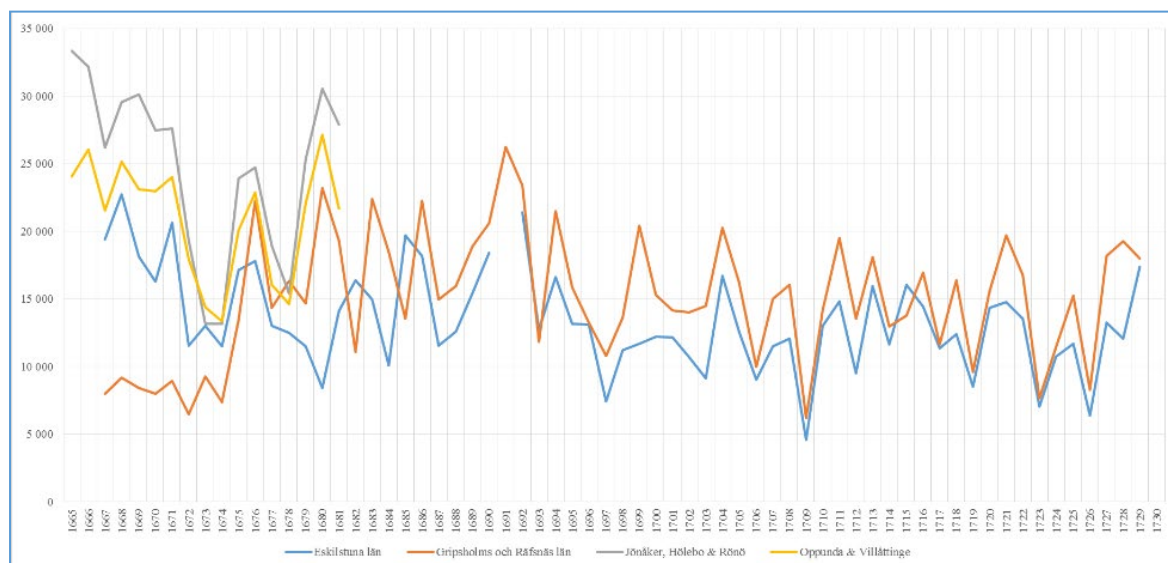
On account of the source materials' deficiencies, harvest estimates for Södermanland have been made according to index among other things. In this project we have striven to estimate index for the parishes' tithes using the base year 1665 = 100. The database's index on the *parish level* must however in this area take 1676 as its year of departure, the first year for which we have parish-wise information for practically the whole area. Via the Orphanage information, it has however been possible to stretch index backwards on the *bailiwick level* for half of the bailiwicks to 1665 and for the other half to 1666. The index consists thus of index averages for the bailiwicks' parishes or, in cases where such information is lacking, of index for bailiwicks. For smaller areas, parish averages may naturally be affected by extreme values in small parishes, but for higher aggregation levels such as bailiwicks, deviating parish values acquire much less significance. It would probably have been better to use median values, but for practical reasons to do with assessment average values have nevertheless been used for harvest estimates via the formula:

$$\text{Index specific year}/100 * \text{tithes 1676} * 15 * \text{Palm's compensation factor for non-paying farms} * 1,1$$

The formula's factor 15 gives the theoretical harvest from the crown's tithes when the crown, as in Södermanland, took 2/3 of the entire tithes. The estimated harvest must also be complemented by estimates for those farms that were exempt from tithes, mainly vicarages and manor estates. For the sake of simplicity, the quotas have been used between tithes and estimated harvest that Lennart Palm has made based on mantals of land for the county in 169?.¹⁷¹ Finally, a 10 percent supplement has been made for roundings-off downwards etc., as has been described in the report's introductory chapter. In the following diagram, the estimated total harvest development is shown for Södermanland on the bailiwick level. For parts of the county, it emerges from the curves that fixed tithes were introduced in 1682, and for the rest in 1730.

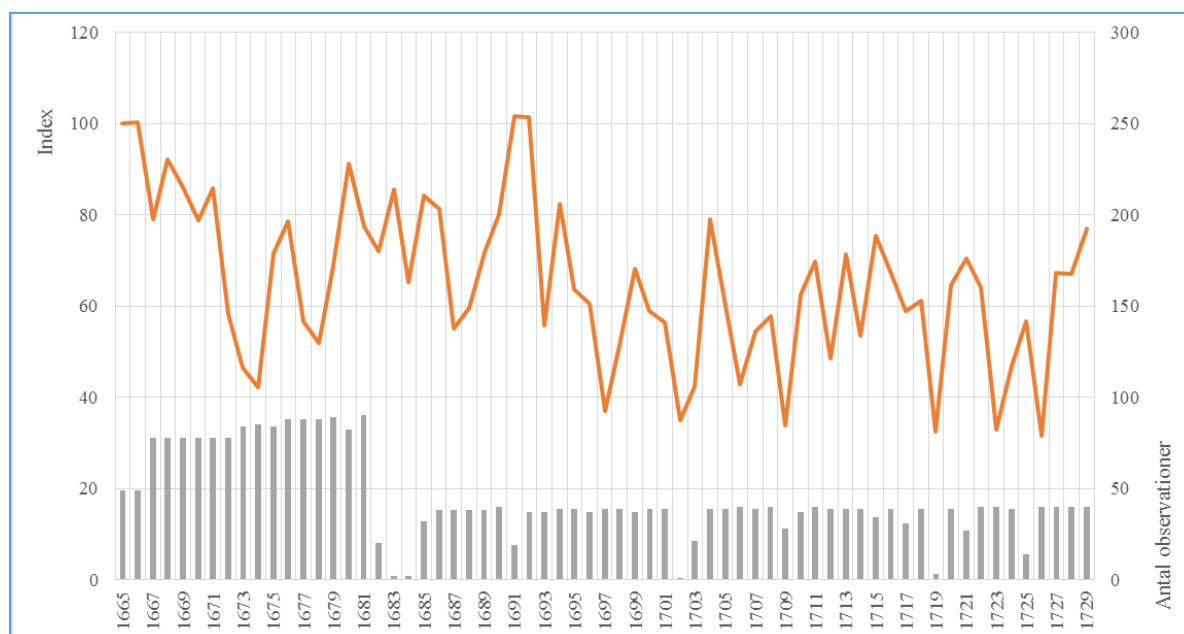
¹⁷¹ See chapter on the Mälär valley counties in Palm 2012.

Estimated harvests in Södermanland bailiwicks in 1665-1729 (barrels of reduced grain)



In the following diagram, the average indexes for the county as a whole are shown, based on the parish or bailiwick information with adjustable tithes at different times. Here the previously mentioned index has been recalculated with the base year 1665 = 100.

Tithes development in Södermanland in 1665-1729 (reduced grain; Index 1665 = 100)



In the diagram, the number of pieces of information on adjustable tithes on which the curve is based at different points in time is shown. The number of observations diminishes drastically after 1681 and sinks thereafter to less than half (especially few observations certain years are because the source material for these years is made up of bailiwick-wise information from the Orphanage). It should be observed that the curve in its various parts is based upon information from varying geographical areas. The diagram's realism is therefore dependent on how representative the adjustable areas at various times have been for the whole, which is something I do not take up here.

The county index with the base 1665 has been entered as a separate document in the database.

Other

There is a verification for 1706 among the Life estate's county accounts that contains tithes lists for Gripsholm county. The accounts of the givers are very detailed and even outlying lands and properties are accounted for, but most often without any information on the number of stooks etc, only that they belong to a certain peasant farmer. These outlying lands are *not* included in the number of givers, or for givers who do not give anything. This means that we will not be able to capture a possible expansion of agriculture – apart from if the tithes/givers (perhaps) increase over time.

Harvests in Södermanland 1665-1729 (reduced grain; index 1665=100)

Year	Index	Number of observations
1665	100	49
1666	100	49
1667	79	78
1668	92	78
1669	86	78
1670	79	78
1671	86	78
1672	58	78
1673	47	84
1674	42	85
1675	72	84
1676	79	88
1677	57	88
1678	52	88
1679	69	89
1680	91	82
1681	78	90
1682	72	20
1683	85	2
1684	65	2
1685	84	32
1686	81	38
1687	55	38
1688	60	38
1689	72	38
1690	80	40
1691	102	19
1692	101	37
1693	56	37
1694	82	39
1695	64	39
1696	61	37
1697	37	39
1698	51	39
1699	68	37
1700	59	39
1701	56	39
1702	35	1
1703	42	21
1704	79	39
1705	60	39
1706	43	40
1707	54	39
1708	58	40
1709	34	28

1710	63	37
1711	70	40
1712	48	39
1713	71	39
1714	53	39
1715	75	34
1716	67	39
1717	59	31
1718	61	39
1719	32	3
1720	64	39
1721	70	27
1722	64	40
1723	33	40
1724	47	39
1725	57	14
1726	32	40
1727	67	40
1728	67	40
1729	77	40
1730	79	1

Variables in the database "Södermanland"

The document "Grunddata"

År

Year

Landskap = Province

Län 1913 = County 1913

Härad = District

Fögderi A = fögderiindelning enligt källmaterialet = Bailiwick A = bailiwick division according to source materials

Fögderi B = fögderiindelningen modifierad genom sammanslagning av Gripsholms och Råfsnäs län =
Bailiwick B = bailiwick division modified by merging of Gripsholm and Råfsnäs counties

Socken = Parish

Vetetionde i decitunnor = Wheat tithes in decibarrels

Rågtionde i decitunnor = Rye tithes in decibarrels

Korntionde i decitunnor = Barley tithes in decibarrels

Blandsädstionde i decitunnor = Mixed grain tithes in decibarrels

Havretionde i decitunnor = Oats tithes in decibarrels

Spannmålstionde (råg + korn) i decitunnor = Grain tithes (rye + barley) in decibarrels

Summa oreducerade tiondetunnor = Sum of unreduced tithes barrels

Summa tionde i decitunnor ren säd = Sum of tithes in decibarrels reduced grain

Beräknade skördar i decitunnor ren säd (från index) = Estimated harvests in decibarrels reduced grain (from index)

Index 1676 = 100

Källa = Sources

Remarks = Anmärkning

The document "Index 1665 = 100"

År = Year

Index

Key to sources

RA = Riksarkivet = central National archives, Stockholm

SSA = Stockholms stadsarkiv = Stockholm city archives

ULA = Uppsala landsarkiv = regional National archives, Uppsala

RA, Länsräkenskaperna, Hedvig Eleonoras Livgeding

SSA, Allmänna barnhuset = huvudböcker respektive år

SSA, Allmänna barnhuset * 40 = Orphanage tithes sums multiplied by 40 to match the Crown's part of total tithes

ULA, Södermanlands län, landskontoret = landsböcker eller verifikationer

Uppsala and Stockholm counties

Lennart Andersson Palm

Administrative divisions

Uppland province in 1665-1714 was divided into two bigger regional administrative units, Uppsala county and Svartsjö castle county. From and including 1715, a reorganisation was undertaken that resulted in three higher administrations – a younger Uppsala county, Stockholm county and Svartsjö county. The latter survived only up until and including 1718 when it was merged with Stockholm county. From this time up until 1785 there were thus only two counties in the region – Uppsala and Stockholm counties (Svartsjö became an independent county once again in 1786). The city of Stockholm itself was not included in any county, but county assignments there were the responsibility of the so-called Överståthållareämbetet. This picture is somewhat simplified and on the next lowest level, the bailiwicks', several reorganisations took place during our period of investigation (see below).

Södertörn was from 1720 included in the then new Stockholm county. The region, consisting of Svartlösa, Sotholm and Öknebo districts, is usually counted as part of the province of Södermanland, but which county it belonged to varied – in 1654-1688 it belonged to Uppsala county, and in 1689-1719 to Södermanland county. Tithes from Södertörn are accounted for in the project's database for Uppsala and Stockholm counties.

The bailiwick *Svartsjö län*, corresponding to almost the whole of *Färentuna district*, belonged before 1666 to Uppsala county but was in 1666-1718 added to the so-called *Hedvig Eleonora life estate*, a kind of pension base for Karl X Gustav's widow. From and including 1719, the county was merged as has been mentioned with Stockholm county.

In 1665, our area under investigation was divided into the following bailiwicks:

- Hagunda, Ulleråker, Bälinge, Vaksala and Rasbo
- Håbo, Ärlinghundra and Bro district (Sw. "härad")
- Lyhundra and Frötuna and Bro coastal district (Sw. "skeppslag")
- Norunda
- Oland, Frösåker and Nordinghundra as well as Lövsta och Dannemora jurisdictional district (Sw. "tingslag")
- Sjuhundra
- Sotholm district and Värmdö parish
- Svartlösa, Öknebo and Sollentuna districts with Danderyd coastal district
- Svartsjö castle county
- Vallentuna, Lång- and Seminghundra districts with Åker coastal district
- Åsunda, Trögd and Lagunda
- Örbyhus county

Around 1690, several changes occurred in bailiwick division and in 1690 this is how it looked:

- Bälinge, Vaksala and Rasbo
- Frösåker, Nordinghundra, Sjuhundra and Häverö parish
- Håbo, Ärlinghundra and Bro district (Sw. "härad")
- Lagunda, Hagunda, Ulleråker
- Lyhundra district and Frötuna and Bro coastal district (Sw. "skeppslag")
- Oland and Dannemora and part of Lövsta
- Sollentuna, Danderyd and Värmdö

- Sotholm, Svartlösa and Öknebo (sometimes also called Södertörn bailiwick)
- Svartsjö castle county
- Vallentuna, Lång- and Seminghundra districts and Åker coastal district
- Åsunda and Trögd
- Örbyhus and Norunda

In 1720, the six bailiwicks named first above remained, but in the others, further changes had occurred. After that, the division seems to have remained unchanged throughout the century:

Stockholm county:

- Frösåker and Närkehundra
- Färentuna (Svartsjö castle county) bailiwick
- Lyhundra, Sjuhundra, Bro-Vätö, Vaddö-Häverö
- Långhundra, Seminghundra and Ärlinghundra
- Sollentuna, Vallentuna, Danderyd
- Sotholm
- Svartlösa and Öknebo
- Åker, Frötuna, Länna and Värmdö

Uppsala county:

- First bailiwick: Håbo and Bro districts as well as of Trögd's district Hacksta, Löt, Veckholm, Torsvi and Kungshusby parishes
- Second bailiwick: Åsunda and the rest of Trögd's district (Härkeberga, Litslena, Husbysjutolft, Villberga, Lillkyrka, Boglösa, Vallby and Bondarnö parishes)
- Third bailiwick: Lagunda, Hagunda and Ulleråker districts
- Fourth bailiwick: Bälinge, Rasbo and Vaksala
- Fifth bailiwick: Örbyhus and Norunda
- Sixth bailiwick: Öland with Dannemora and (Öster-)Lövsta parishes

The cities constituted their own independent bailiwicks, which however is of no significance here, since their tithes in those cases were harvest-dependent, **have not been excerpted systematically.**

The foregoing means among other things that the individual bailiwick sums occurring in part of the database, the part that is mainly based on the so-called Orphanage commission (see below), cannot be used outright for comparisons over time. On the other hand, they can be used directly for county and province comparisons and for comparisons over time for Svartsjö castle county, as well as, if some bailiwick sums are added together in a suitable way, for bailiwick groups.

Parishes

On the parish level, there are many administrative irregularities within the area of investigation. The church parish was not always the same as the civil parish according to the crown cadastres. Thus, Jumkil church parish was divided between two bailiwicks and Hökhuvud church parish with its *Sandby åtting* before 1889 in the cadastre was divided between "Öland district", "Roden" and "Frösåker district". The old concept Roden included Uppland coastal areas. It happened that some single farms in one church parish paid their tithes to a cadastre civil parish. Sankt Olof and Sankt Per parishes belong to different districts from and including 1715 (Håbo and Ärlinghundra respectively). There has not been any possibility in the project to go into this more closely or possible changes in this context; if nothing else is stated in the database's remarks column notes, then the tithes lists' parish divisions are meant.

Parish names have sometimes changed over time: Helga Trefaldighet during our period of investigation is called Bondkyrka, Arnö is called Bondarnö or Arnöberg (e.g. in 1700), Kungsängen is called Näs. Västeråker was only called Åker and there are several Näs without further definition in the material (they have however been identifiable). Vårfrukyrka is today part of Enköping town. “Östertälje” has been understood as Södertälje’s country annex parish (Sw. landsförsamling) and is accounted for under the name Östertälje.¹⁷²

Source materials

Crown accounts

Severe damage has occurred in the National Archives county accounts from the area investigated – up to now only the years 1667, 1672, 1689 and 1696 in the older Uppsala county for the 1600s have wholly or partly been accessible for research.¹⁷³ For both the old and new Uppsala counties the county accounts office’s copies of the accounts are kept in the Uppsala regional National Archives (ULA) (the accounts are in three copies, one for the district scribe’s archive, one for each county government and one for the Kammarkollegiet – the last is today included in the central National Archives’ accounts). In the Uppsala regional National Archives there are a number of tithes extracts that fill the gaps in the central National Archives’ tithes material, partly among the county accounts office’s ledgers and verifications, partly in a separate series in the same office’s archives.¹⁷⁴ In the documents on tithes there are sometimes compilations of tithes information from previous “harvest-dependent tithes” periods, among others for a number of parishes in 1721-1729.¹⁷⁵

After Stockholm county had been formed, gaps were found in the tithes material also for this county in the central National Archives. County accounts available there are few – the summaries and/or verifications exist for the years 1722-1723, 1737-1738, 1740, 1744-1748, 1751-1753, 1757, 1758-1759, 1761 and 1777. The Stockholm county accounts office’s tithes extract in the Stockholm city archives (SSA) can however in this case fill many of the gaps. As for Uppsala county, the county accounts office put the tithes information into a special series: in it are tithes lists, tithes budgets and extracts for a number of years from 1715 to at least 1780 as with certain years for Södertörn.¹⁷⁶

For Svartsjö and the 1600s, there are accounts in several different archives in the National Archives. The accounts for Svartsjö’s Lovö with Drottningholm are included for 1661-1665 among the Uppsala county accounts. Separate accounts for Svartsjö county (1663) and 1671-1690 can be found among the regular county accounts for the Life estate in the National Archives, and also for certain years in Hedvig Eleonora’s Life estate’s own archives.¹⁷⁷

¹⁷² Information according to the source material’s parish division is noted in the database’s column “Socken A”. The source material sometimes shows two parishes’ tithes in one lump sum. This does not happen consistently but may for some parishes be valid for certain periods, while the other periods are shown in the database’s column “Socken B” that may ease part of the summation.

¹⁷³ For accounts for Sotholm and Värmdö coastal regions (1662)-1677 see Jon Pedersson Lilles arkiv in the central National Archives, (förteckning 541). These have not been investigated here.

¹⁷⁴ The following tithes extracts have been found in the archives of Länsstyrelsen i Uppsala läns landskontor, ULA, in the following volumes in series GIIE: 1: 1676 – 1692, Handlingar rörande prästerskapets försträckta kronotionde till flottans utrustning; 2. 1680–1719, Kyrkotiondeförslag; 3. 1698 – 1729. Tionde- och hammarskatten i Uppland; 4-11. Kyrko- och tiondelängder och förslag 1713-1837. The county accounts office’s volume EIa:12 1668-1670 only contains residual accounts etc. 1667- 1670, nothing about tithes.

¹⁷⁵ From Södermanlands länsstyrelse, landskontoret, the series GIIE:5-6, 8, ULA, give the following: From 1693 only extracts over kept tithes exist for “infantry” parishes in Oland, Frösåker, Lyhundra, Frösåker, Värmdö, Frötuna och Bro skeppslag, Lagunda, Hagunda and Ulleråker. For the project database’s tithes, an estimation has been made by first a supplement of the parishes’ fixed “customary reductions” (in this case without Orphanage charges), thereafter a further supplement for the Orphanage charge via multiplication of the sums received by (40/39).

¹⁷⁶ Stockholms läns landskontor, G3 E 1-5, SSA.

¹⁷⁷ Hedvig Eleonoras livgeding, Guvernementskontoret, central National Archives (RA).

As for most years and areas in the project, tithes extracts have mainly been used here in parish-wise compilations. They have as a rule had a normal structure, but some peculiarities have been observed. For some years in the 1600s, in some parishes with special tithes receivers, only the customary reductions (see introduction) have been given for the parishes. Most often however there are special notes either in the margins or in an explanatory paragraph at the end of each bailiwick's extract, about what these parishes have given in revenue. The aim has clearly been to make possible comparisons between the actual results and what the allocation to these receivers was originally considered to correspond to. Sometimes tithes have not sufficed even for the "customary reductions".¹⁷⁸

Other parish-wise accounts

The extensive gaps in the accounts of the area investigated mean that tithes information must be sought elsewhere, with the receivers such as regiments, hospitals, schools and for this area in question, the big Stockholm Orphanage (see below) etc. One problem with these accounts is that the receivers' archives are spread out and have often been lost. Another is that the receivers were only allowed to keep the tithes that exceeded the so-called "customary reductions". Astrid Hegardt has for example mapped Uppsala Academy's allocated tithes with the aid of the academy's preserved accounts.¹⁷⁹ Some of her information has been used to make up the database.

Bailiwick information in the Stockholm Orphanage accounts

The Orphanage accounts in the Stockholm city archives are in very good condition. "The Orphanage barrel" seems, at first, to be an excellent source at the bailiwick level at least to be able to fill the serious gaps in the parish material for the 1600s for this area of investigation. Multiplication by 40 should give the crown's *unreduced* tithes, according to the regulations, i.e. the whole Crown tithes according to the tithes lists without any reductions. A closer study indicates however certain problems, particularly for the investigation period's early years. Here and there it happened namely that bailiffs estimated the Orphanage's 40th part initially on the crown's *reduced* tithes i.e. what was left after the so-called "customary reductions". It may be suitable already at this point to show how a homogenous tithes series, despite these problems, had been constructed at the bailiwick level.

In order to decide when the transitions to the regulations' gross principle – 1/40 of the unreduced tithes – took place, comparisons have been made between the total tithes and the Orphanage charge as paid for the years where both sources have been available.

It was first in 1675 that most bailiwicks seem to have started to apply the method of calculation ordered in the regulations. Sotholm district with Värmdö parish deviated from the regulations' ruling up until 1681 when its bailiwick division was changed, and the same thing for Svartlösa, Öknebo and Sollentuna with Danderyd coastal district bailiwick. Sollentuna with Danderyd and Värmdö coastal district's bailiwick, formed in 1681, even when Åker coastal region had been added in 1693, continued to count in this way at least until 1714, when our investigation of Orphanage accounts has mainly been terminated. Svartsjö castle county bailiwick started to follow the rules as late as in 1697 after reminders from the Kammarkollegiet.¹⁸⁰

Cut-off years for the transitions between these methods of calculation have thus been able to be established, thereby making it possible to select calculation method for years when only Orphanage information has been available. In cases in which the charge has stood at a 40th part of the unreduced Crown tithes, the Orphanage charge multiplied by 40 has provided the total Crown tithes.

¹⁷⁸ Several examples of this are found in the material from Uppsala county, among other years 1693 and 1697.

¹⁷⁹ Hegardt 1975.

¹⁸⁰ Concerning Svartsjö according to the Kammarkollegium's letter 18/12 1696 in the Stockholms barnhus, huvudbok 1697, p. 730, SSA.

Where the charge has been calculated on the Crown tithes *after* the customary reductions (see the report's introductory chapter and examples in the chapter on Södermanland) the Crown tithes have been estimated with the aid of the following formula:

$$40 * (((\text{customary reductions} - \text{the stated Orphanage barrel}) / 40) + \text{the stated Orphanage barrel})$$

Customary reductions then estimated from years near the Orphanage information in question. Further irregularities which give underestimations of the tithes from Orphanage information have been observed: for shorter or longer periods, certain parishes in the area did not hand in any charge at all to the Orphanage. Thus was Lyhundra district exempt from the Orphanage charge in 1668-1670 as a shire (Lennart Torstensson's Ortala), **periodically also parishes that were dominated by a manor and its copyholders**, among them Sankt Per, Sankt Olof and Skokloster. In 1683 however they were included in the extracts and also partly in 1682. Certain years, information is missing for Lyhundra, Sjuhundra, Hagunda and Vallentuna bailiwicks.

For Svartsjö castle county, Orphanage figures have not been found, or have been incomplete for the years 1666-1672 (- 1682 for Lovö). Explanations can be found in preserved crown accounts and are several. To start with, there were several temporary loans of the county's parishes' tithes to various persons, e.g. "wife Anna von der Linde free for her lifetime (Munsö and Skå) or the clergyman in "St. Clara", Klara congregation in Stockholm. One further explanation is connected with Lovö parish with Drottningholm. Drottningholm castle county belonged from 1661 to Hedvig Eleonora's life estate and its tithes were accounted for in 1665 in the source materials for Uppsala county.

In the project's database, Orphanage information has only been included when alternative information is lacking. Consideration has then been taken to the varying methods of calculation concerning the charge according to the above.

Measuring vessels' volume, measuring barrel

Generally speaking, tithes in the area were estimated in "fat" (f) or kappes (C) both having the same volume.

The barrel as measuring unit, measuring method, excess measures

Comparisons between tithes extracts, tithes lists and Orphanage accounts show that in the latter two's tithes figures in barrels with excess measure correspond in number to the tithes lists' levelled-off barrels. The databases' stated tithes sums are intended to correspond with levelled-off barrels.¹⁸¹ Changes in methods of measurement in the 1730s have not left any mark that changes the project's harvest estimates etc.¹⁸²

Tithes system

In order to estimate the tithes' value as a harvest indicator, it is particularly important to ascertain the method of calculation that to a certain degree could vary locally. As far as it is possible to assess, in this area under investigation the clergy kept one third of the tithes and the crown the rest.

One important control instrument for tithe recipients was test threshing. The valid 1638 tithes instruction from the beginning of our period ordered this. Did it occur in this area under investigation? How comprehensive was it in those cases? In an account from 1638, the country's peasant farmers' representative in Parliament stated that in Uppland at that time, they only counted the number of stooks ("skyl"), and the yield per stook according to a fixed model: a stook ("skyl") of

¹⁸¹ In 1685-1689 in exceptional cases, Norunda and Örbyhus bailiwick account in their extracts for tithes in levelled-off **and excess measures separately**.

¹⁸² Some uncertainty about the new rules is mirrored in the Orphanage accounts for 1736 where for Uppsala county after the sum of Orphanage charges is written: "... grain, if no part of it will be revoked due to the new measuring vessels ...".

grain was half a *spann* in both “good and bad years”. This must have meant a certain evening-out of tithes over the years).¹⁸³ Test threshing thus did not occur at that time.

Transitions to regular test threshing in Uppland may eventually have occurred at different points in time in different parts of the province. As in other areas, the 1688 bailiwick instruction seems to have involved a sharper attitude. After this time many examples of test threshing occurred. For 1689 there exists a parish-wise list for yield per stook (“skyl”) for rye, barley, wheat and oats for Bälänge, Rasbo and Vaksala districts (often 5 or 6 Swedish firkins per stook).¹⁸⁴ In 1690, it is noted in the lists for Lyhundra, Frötuna and Bro coastal district that test threshing had been carried out “only according to the simple test that they had found at the peasant’s farm since it had been threshed ...”. This indicates that test threshing was implemented but that the test had been carried out in the peasants’ homes, not in a tithes barn as ordered in different regulations, at least not in this bailiwick. In 1697 there was a more extensive test threshing in Nördinghundra district (e.g. for Almunge parish stook-counting (“skylräkning”) according to “sheaves and the peasants’ united statement” as well as after test threshing counting 2, 3, 3 Swedish firkins respectively for rye, barley and oats from each stook, a single threshing figure for each parish). In Svartsjö county, by all accounts, test threshing was implemented at least until the mid-1700s. Separate test threshing lists have been observed in among others the tithes accounts for 1702 (Lyhundra), as well as elsewhere in 1731, 1753, and 1754.

That a fixed standard norm for yield per stook (“skyl”) continued in use, or had been reintroduced, is apparent from certain information. In 1671, some parishes in western Uppland and allocated to Uppsala academy were allowed to hand in 3 Swedish firkins per barley stook and 2.5 Swedish firkins per rye stook (“rök”) “since they could not expect more anyway”.¹⁸⁵ For the parishes allocated to the infantry, it is said in 1690 that at threshing 3 Swedish firkins per stook should be counted “according to the old contract, good and bad years”.¹⁸⁶ When in 1761 the same yield figures were stated for all the parishes in Färentuna district, it shows that this way of counting might occur far on in time – here 2 Swedish firkins for wheat and rye, 2 Swedish firkins 2 kappes for barley and oats. If the same stook standard for yield had been allowed to dominate for several years this means naturally that a fixed element had been introduced in tithes estimates and that some part *may* have been withheld. Here a researcher can only comfort her- or himself with the fact that the crown and other tithes recipients would scarcely have accepted any dramatic embezzlement.

How common standardisations of stook yields actually was in the area has only been possible to find out through spot checks because of the great lack of available tithes lists. At least from about 1690 test threshing seems however to have been the most common.

A further control method used for a long time by the crown was to demand accounts of what the parson’s portion of the tithes had amounted to. The Crown tithes ought then to amount to twice that, since the parson kept a third of the total tithes. He took home to the vicarage his every third stook etc. directly after drying in the field and certainly did not abstain from his right in this respect. In Lyhundra, Frötuna and Bro districts in 1690 and for among others Håbo district in 1699, examples of this can be found in appended compilations of the “clergy tertial” in the crown accounts.¹⁸⁷

Another control method was auditing. A comprehensive audit was carried out for example in Åsunda and Trögd districts concerning both tests and tithes per crop in which comparisons were made between the results in 1717 and 1718. For Hagunda, Lagunda and Ullersåker, test threshing figures were introduced in the tithes extract itself.¹⁸⁸

In the area under investigation, the tithes’ distribution over crops has varied: wheat, rye, barley and oats are taken up, but not beans or peas. Sometimes rye and barley are mixed under the heading

¹⁸³ Björn Helmfrid 1949, p. 56. One should note that the *spann*’s volume might have been changed after 1664.

¹⁸⁴ This has been used to estimate tithes for 1689 in this area for which I have assumed 12 “band” per stook.

¹⁸⁵ Hegardt 1975 p.29.

¹⁸⁶ Uppsala läns landskontor, GIle:1, ULA.

¹⁸⁷ If only here as verification of “tithes money” that accompanied the clergy tithes at that time.

¹⁸⁸ Uppsala läns landskontor, GIle:2, ULA.

“grain”. Tithes in only “grain” have been interpreted in the database as reduced grain. In 1729, Fröslunda and Nardingundra handed in half of their tithes in rye and half in barley. This is a division according to a model that is often linked to fixed tithes, which is why one may suspect that the harvest-dependent tithes here do not mirror the true crop distribution.

Fixed tithes settings

Fixed tithes settings occurred during various periods for different areas. Stockholm county had some early procedures: Åker, Frötuna and Värmdö coastal regions had fixed tithes at least after 1715.¹⁸⁹ The next great wave of tithes settings drew over the county in 1726-1731. In 1726, tithes were set for the whole county according to the barley figures 3 or 4 depending on the soil's quality in the parishes.¹⁹⁰ In 1744, the setting list refers to 1731 for Danderyd, Sollentuna and Vaksala.¹⁹¹ Färentuna district's Sånga and Ekerö parishes got fixed tithes in June 1760, and the rest of the district by all signs in 1764.¹⁹²

In Uppsala county, comprehensive tithes settings took place during the 1720s: in 1729 for Håbo, Bro, Trögd and Åsunda districts' parishes in the First bailiwick, the method used was to set a certain sum based on seed for sowing, the yield figure 3, and the parishes' average tithes in 1721-1729. In 1729, another method was used for Åsunda's eight parishes in Trögd (Second bailiwick); Lagunda, Hagunda and Ulleråker (Third bailiwick); Bälinge, Vaksala and Rasbo (Fourth bailiwick); and Örbyhus and Norunda (Fifth bailiwick). The method here was according to seed for sowing, a standardized yield figure 3 and the average tithes per mantal for six farms per parish in 1710-1724. **Mantal here a tax assessment unit based on a farm's resources.**¹⁹³

The source materials show that all tithes settings were not immediately implemented. Negotiations between on the one hand the crown and other recipients, and on the other the peasant farmers, could take time before an “agreement” was made. Also, after a period of fixed tithes in a few cases there was a return to harvest-dependent tithes. One such case, observed by chance, is Haga parish that in 1739 got fixed tithes but in 1764-1766 returned to adjustable tithes, after which it returned to fixed tithes once more. An odd situation is demonstrated by Holm parish that continued with harvest-dependent tithes up until 1782 despite the fact that the rest of Stockholm and Uppsala counties had had fixed tithes for decades.

In order to clarify when fixed tithes were actually introduced, I have looked at the tithes accounts in which in the extract it is either clearly stated whether or not tithes were fixed or else the situation is clear from the fact that tithes from and including a certain year remain unchanged.¹⁹⁴ The years of introduction I found appear in the tableau below:

¹⁸⁹ A compilation of the bailiwicks' tithes in 1715-1728 in Stockholms läns länsstyrelse, Landskontoret, serie G 3 E, SSA.

¹⁹⁰ Handlingar rörande tionden, ULA. From Långhundra, Seminghundra and Ärlinghundra, tithes setting lists for 1726 also occur among Stockholm county's landsboksverifikationerna for 1727 in SSA.

¹⁹¹ Stockholms läns landskontor, E3G för 1744, SSA.

¹⁹² See tithes extract for this year.

¹⁹³ Uppsala läns landskontor, GIIe:5, ULA. Further tithes setting material exists from 1730-1739 ibidem GIIe:8.

¹⁹⁴ In the Sandberg'ska samlingen at the central National Archives, Sandberg states years for fixed tithes introduction in different districts, years that do not always agree with those I have found (LL 641, LL 660, LL 666. In the Kammarkollegiet's compilation of fixed tithes in Stockholm county (p. 187), there is a reference for Sotholm to an agreement from 1730 (Kammarkollegiet, 1:a provinskontoret, volym 83:3, central National Archives. For Öknebo and Svartlösa there is a reference in 1737 to tithes setting but without giving the year (ibidem p. 213).

Fixed tithes according to various information

Cou nty	District, coastal region	Setting lists found	Year of introduction
UP	Bro		1747
UP	Bälinge		1747
UP	Dannemora		1738 partly
UP	Hagunda		1738 partly
UP	Håbo	1730	1730 partly
UP	Lagunda	1725	1738 partly
UP	Lyhundra	1728	1730
UP	Lövsta		1737
UP	Norunda		1739
UP	Olands		1736
UP	Rasbo		1726 partly
UP	Trögd	1729	1741 partly
UP	Ulleråker		1738 partly
UP	Vaksala		1739 partly
UP	Åsunda	1729	1741 partly
UP	Örbyhus		1738 partly
ST	Bro coastal district	1728	
ST	Danderyd	1728	1731
ST	Frösåker		1730
ST	Frötuna coastal district		≤ 1708
ST	Färentuna/Svartsjö	1737, 1760	Sånga and Ekerö 1760, others 1764 or 1765
ST	Långhundra	1730	1732
ST	Närdinghundra	1737	1730
ST	Seminghundra	1730	1730 partly
ST	Sjuhundra	1728	1732
ST	Sollentuna	1728	1731
ST	Sotholm	1730	1731
ST	Svartlösa	1730	1730, 1731?
ST	Vallentuna	1728	1731
ST	Väddö coastal district	1728	1730
ST	Värmdö coastal district	1738	Circa 1716
ST	Åker coastal district		1719
ST	Ärlinghundra	1730	1732
ST	Öknebo	1737	1732

Remark: ST = Stockholm county; UP = Uppsala county. Coastal district = Sw. skeppslag.

Sources: See previous text with notes, and source references in the database.

Harvest estimates

In order to estimate harvests, Crown tithes must be adjusted upwards and account taken of: 1) how great the crown's portion of the tithes was, in these counties 1/15 since here the Crown took 2/3 of the tithes; 2) adjustment upwards for among other things the roundings-off downwards when estimating tithes, with the factor 1.1 (see the report's introductory chapter); and finally 3) adjustment upwards for exempt farms like manors and vicarages.

The *parish-wise* tithes series we can produce in this way for Uppsala and Stockholm counties from the crown accounts unfortunately show many gaps. The method closest to hand for trying to compensate for these gaps for the individual parishes is with more or less reliable estimates. Estimating these hundreds of parish gaps has however been an altogether too comprehensive task to be accommodated within this project. In the **project** database, harvest estimates at parish level have however been included where information has been available. Each parish can thereby be followed for shorter or longer periods.

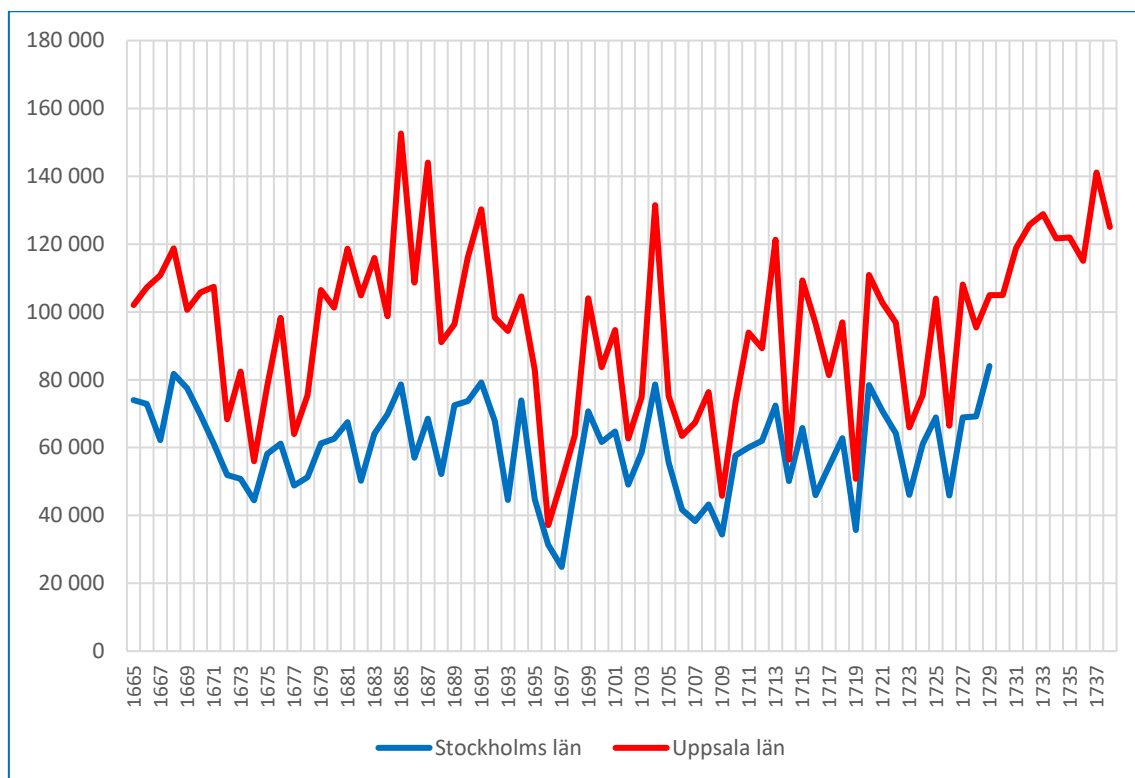
Despite all the gaps at the parish level, it has been important to make harvest estimates at higher aggregate levels like districts, bailiwicks or counties. I have been satisfied here with estimates at the *county level*. The estimates had several steps.

Making county estimates directly from Orphanage information as has been done in several other areas in the project, turned out to be difficult here since two counties are involved. The Orphanage's tithes information turned out to be difficult to handle when we wanted to use it for Stockholm and Uppsala counties. The Orphanage information consists as a rule of sums for whole bailiwicks and some bailiwicks were divided between the two counties according to district. In the database, the districts are on the other hand unambiguously linked to one or the other county. It has therefore been suitable to use districts as the basis for county estimates. When a certain bailiwick's districts in their totality belonged to either Stockholm or Uppsala county, its tithes fill many of the source material's gaps in a simple way, and the parish gaps often coincide with simultaneous gaps for whole districts or bailiwicks. When the Orphanage's bailiwicks lay on both sides of the county boundary, and were divided between both counties, I have chosen to distribute their tithes roughly according to the bailiwick's (sub-)districts (Sw. *härads*) or coastal district (Sw. *skeppslag*). In some cases I have made estimates according to developments in neighbouring districts.

In the manner described, tithes information is obtained for practically all districts and the whole period of investigation. In order to deal with the problem of the few sporadically remaining parish gaps, I chose to produce a yearly average index from the above-mentioned information on districts or parishes for the harvest estimates with tithes per county. This has been put in the database column "Index (1665=100)". These index averages were then divided by 100 and multiplied by the index series' base, i.e. the estimated tithes 1665. The tithes series that resulted were finally adjusted upwards to the harvest in the usual way. The resulting harvest development is shown in the following diagram. The curves were terminated when the number of parishes with harvest-dependent tithes had been too low for giving representative estimates, for Stockholm County 1629, for Uppsala 1738.

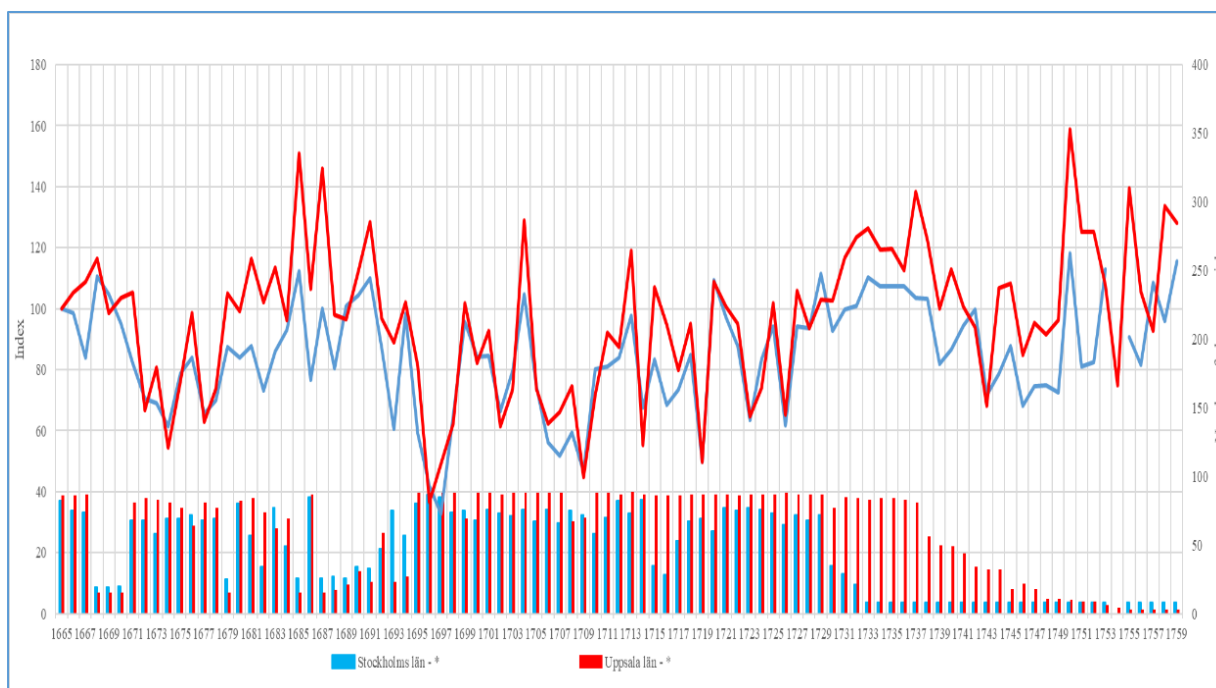
When the Orphanage information has been used, consideration has of course been taken to the different ways in which it has been used (see above).

Estimated harvests in Uppsala and Stockholm counties for years with harvest-dependent tithes from and including 1665 (barrels reduced grain)



Here I show finally the two counties' tithes development in index form. Please observe the decreasing number of parishes contributing to the indices from and including the 1730s, which means successively ever greater uncertainty concerning representativity.

Harvest development in Uppsala and Stockholm counties 1665-1759 (index 1665=100)



Varia

The authorities suspected that the tithes counters often cheated. But the counters had strong defensive arguments. In Åsunda district, “tithes audits” (Sw. rannsakingar) were for example prevented in 1711 by “God better the deplorable epidemic’s prevalence” (the latest outbreak of plague in Sweden). In the source materials from Svartsjö castle county, bad harvests are stated for 1693 and 1696.

Tithes index for Uppsala county 1665-1759 (Index 1665=100)

Year	Index	Number of parishes
1665	100	86
1666	105	86
1667	109	87
1668	116	15
1669	99	15
1670	104	15
1671	105	81
1672	67	84
1673	81	83
1674	54	81
1675	76	77
1676	99	64
1677	63	81
1678	74	77
1679	105	15
1680	99	82
1681	116	84
1682	102	74
1683	114	62
1684	96	69
1685	151	15
1686	106	87
1687	146	15
1688	98	17
1689	96	21
1690	112	31
1691	128	23
1692	97	59
1693	89	23
1694	102	27
1695	81	88

1696	36	88
1697	49	88
1698	62	88
1699	102	69
1700	82	88
1701	93	88
1702	61	87
1703	73	88
1704	129	88
1705	74	88
1706	62	88
1707	66	88
1708	75	67
1709	45	70
1710	72	88
1711	92	88
1712	88	87
1713	119	89
1714	55	87
1715	107	86
1716	95	86
1717	80	86
1718	95	87
1719	50	87
1720	109	87
1721	101	87
1722	95	86
1723	65	87
1724	74	87
1725	102	87
1726	65	88
1727	106	87
1728	94	87

1729	103	87
1730	103	77
1731	117	85
1732	123	84
1733	126	83
1734	119	84
1735	120	84
1736	113	83
1737	138	81
1738	123	56
1739	100	50
1740	113	49
1741	101	44
1742	94	34
1743	68	32
1744	107	32
1745	108	18
1746	85	22
1747	95	18
1748	91	11
1749	96	11
1750	159	10
1751	125	9
1752	125	9
1753	108	6
1754	75	4
1755	139	3
1756	106	3
1757	93	3
1758	134	3
1759	128	3

Tithes index for Stockholm county 1665-1759 (Index 1665=100)

Year	Index	Number of parishes
1665	100	82
1666	98	75
1667	84	74
1668	110	19
1669	105	19
1670	95	20
1671	82	68
1672	71	68
1673	69	58
1674	62	69
1675	79	69
1676	84	72
1677	66	68
1678	70	69
1679	87	25
1680	84	80
1681	88	57
1682	73	34
1683	86	77
1684	93	49
1685	112	26
1686	77	85
1687	100	26
1688	80	27
1689	101	26
1690	104	34
1691	110	33
1692	87	47
1693	61	75
1694	98	57
1695	59	80
1696	42	87
1697	33	85
1698	65	74
1699	96	75
1700	84	68
1701	85	76
1702	66	73
1703	79	71
1704	105	76

1705	75	67
1706	56	76
1707	52	66
1708	59	75
1709	46	72
1710	80	58
1711	81	70
1712	84	82
1713	98	73
1714	68	83
1715	83	35
1716	69	28
1717	73	53
1718	85	67
1719	50	69
1720	109	60
1721	97	77
1722	88	75
1723	64	77
1724	83	76
1725	94	73
1726	62	65
1727	94	72
1728	94	68
1729	111	72
1730	93	35
1731	100	29
1732	101	21
1733	110	8
1734	107	8
1735	107	8
1736	107	8
1737	104	8
1738	103	8
1739	82	8
1740	87	8
1741	94	8
1742	100	8
1743	72	8
1744	79	8
1745	88	8
1746	68	8
1747	75	8

1748	75	8
1749	73	8
1750	118	8
1751	81	8
1752	82	8
1753	113	8
1754		
1755	91	8
1756	82	8
1757	109	8
1758	96	8
1759	115	8

Variables in the database "Uppsala och Stockholms län" according to administrative boundaries in 1913

The page "Grunddata"

Årtal = Year

Härad eller motsvarande = District or equivalent

Socken A = Sockenindelning enligt källmaterialet Parish A = parish division according to source materials

Socken B = Som under "Socken A" med den skillnaden att socknar vilkas tionde någon gång samredovisats anges under ett gemensamt begrepp (se texten) = Parish B = as under Parish A with the difference that parishes whose tithes have at any point been accounted for together are specified under a common concept (see text)

Vetetionde i decitunnor = Wheat tithes in decibarrels

Rågktionde i decitunnor = Rye tithes in decibarrels

Svedjerågktionde i decitunnor = Burnt rye tithes in decibarrels

Korntionde i decitunnor = Barley tithes in decibarrels

Blandsädtionde i decitunnor = Mixed grain tithes in decibarrels

Havretionde i decitunnor = Oats tithes in decibarrels

Ärttionde i decitunnor Pea tithes in decibarrels

Böntionde i decitunnor = Bean tithes in decibarrels

Tiondet i oreducerade decitunno = Tithes as unreduced decibarrels

Tiondet i decitunnor ren stråsäd = Tithes in decibarrels reduced straw grain

Skörd per socken i decitunnor ren säd = Harvest per parish in decibarrels reduced grain

Beräknad skörd inklusive häradsuppgifter = Estimated harvest including district information

Källa = Source

Anmärkning = Remarks

The page "Index för länen"

År = Year

Index (1665=100) Stockholms län = Index (1665=100) Stockholm county

Index (1665=100) Uppsala län = Index (1665=100) Uppsala county

Beräknad skörd Stockholms län = Estimated harvest Stockholm county

Beräknad skörd Uppsala län = Estimated harvest Uppsala county

Antal observationer Stockholms län = Number of observations Stockholm county

Antal observationer Uppsala län = Number of observations Uppsala county

Key to sources

Hedvig Eleonoras livgeding, Guvernementskontoret, räkenskaper, RA

Länsräkenskaper, Livgedinget, räkenskaper, RA

Länsräkenskaper, Svartsjö län, RA

Länsräkenskaper, Svartsjö län, verifikation, RA

Länsräkenskaper, Uppsala län, landsbok, RA

Länsräkenskaper, Uppsala län, RA

Länsräkenskaper, Uppsala län, verifikation, RA

Länsräkenskaper, verifikation, Stockholms län, RA

Länsräkenskaper, Svartsjö län, RA

RA = Riksarkivet

SSA = Stockholms stadsarkiv

Stockholms barnhus, huvudbok, SSA

Stockholms län, landskontoret, landsbok, SSA

Stockholms län, landskontoret, räkenskaper, SSA

Stockholms län, landskontoret, serie G3E, SSA

Stockholms län, landskontoret, SSA

Stockholms län, landskontoret, verifikationer, SSA

Södermanlands län, landskontoret, landsbok, ULA

Södermanlands län, landskontoret, ULA

ULA = Uppsala landsarkiv

Uppsala län, landskontoret, landsbok eller verifikationer, ULA

Uppsala län, landskontoret, landsbok, ULA

Uppsala län, landskontoret, serie GIle, ULA

Uppsala län, landskontoret, serie GIle:1, ULA

Uppsala län, landskontoret, verifikationer, ULA

Västerbotten

Lennart Andersson Palm

Administrative divisions

Västerbotten province was also a county in 1642-1660, and in 1661-1664 the province belonged to the Västernorrland county of that time and then from and including 1665 and onwards it was once again an independent county. During our period of investigation Västerbotten was in the years 1665-1668 and 1670-1674 united with Österbotten (in today's Finland). In 1751 Kautokeino parish with Karasjokk was transferred to Norwegian Finnmark. The border at Ume lappmark (a district inhabited by Sami people) was adjusted at the same time in favour of Sweden. Through the war of 1809, Torneå town, Över- and Nedertorneå parish, Torne lappmark east of the river, and also Kemi lappmark were lost to Finland. The county was divided in 1810 into the younger Västerbotten county and Norrbotten county. In the database, no consideration has been taken to the Västerbotten border changes mentioned. The database refers to practically the whole province before 1810. Parishes in Österbotten are not included in the databases.

During the period of investigation, the then Västerbotten county was divided into two bailiwicks :

Southern bailiwick (Sw. Södra fögderiet):

- Umeå parish. Umeå town received its first town privileges in 1588
- Bygdeå
- Löfvånger
- Nysätra
- Burträsk
- Skellefteå

Degerfors parish from 1768/1800

Holmön parish from 1802

Northern bailiwick (Norra fögderiet):

- Piteå parish and Piteå town (from 1621)
- Luleå parish and Luleå town (from 1621)
- Råneå
- Överkalix
- Nederkalix
- Nedertorneå
- Hietaniemi parish from 1637
- Övertorneå
- Pajala

In 1728-1810, the earlier bailiwick division was replaced according to the following:

First bailiwick (Sw. Första fögderiet, corresponds to the earlier Southern bailiwick):

- Umeå parish and town
- Degerfors parish from 1768/1800
- Holmön parish from 1802
- Bygdeå
- Löfvånger

- Nysätra
- Burträsk
- Skellefteå

The following three bailiwicks correspond to the earlier Northern Bailiwick:

Second bailiwick (Sw. Andra fögderiet):

- Piteå parish and town
- Älvsby parish from 1809

Third bailiwick (Sw. Tredje fögderiet):

- Luleå parish and town
- Råneå
- Överkalix
- Nederkalix

Fourth bailiwick ((Sw. Fjärde fögderiet):

- Nedertorneå
- Karl Gustafs parish from 1783
- Hietaniemi
- Övertorneå
- Pajala parish from 1725

Västerbotten's bailiwicks were sometimes called "kontrakt" or deaneries. In the database, for the sake of comparison I have kept the old bailiwick divisions when I have only had access to bailiwick figures after 1728, and then set First bailiwick as equal to the Southern bailiwick and the other bailiwicks as equal to the Northern bailiwick.

Source materials

As emerges from the section on crises below, the county was struck by several archival losses. During the Great Nordic War (1700-1721), the 1713 lists for the Southern bailiwick were destroyed when Russian troops burned Umeå on the 13/9 1714¹⁹⁵, the Kammarkollegiet, third province office's archive burned down in 1802 and the Västerbotten county government office in 1888. The following sources have however been possible to use:

Crown accounts

Even though the county's tithes lists are relatively well preserved in the central National Archives, some gaps occur in the oldest material. The materials in the Västerbotten and Norrbotten county accounts offices' archives in Härnösand's regional National Archives, that survived the fire, are not of much help. Among the summaries of incomes and costs verifications in the Norrbotten county accounts office's archives in Härnösand, tithes information has however happened to be preserved for isolated years for the Västerbotten Northern bailiwick for the periods 1699-1736 and 1750-1792.¹⁹⁶ Only for Piteå town in 1750 have these been able to fill the gaps in the central Nation Archives' county accounts.¹⁹⁷ Some information for 1750 has been possible to find in the Skellefteå

¹⁹⁵ Länsräkenskaper, Västerbottens län, verifikationer 1714 p. 1395 r; RA.

¹⁹⁶ Norrbottens läns landskontor, volymerna EIC:1-3, HÄL.

¹⁹⁷ From among others the 1690 and 1697 tithes accounts, it emerges that half the crown's tithes were allocated to the trivial school and 1/3 to the upper secondary school in Piteå. Any accounts for these tithes recipients were not

bailiwick's district scribe's archives in the Härnösand regional National Archives.¹⁹⁸ For 1723 and 1750, county sums that have been encountered have also been added to the database.

As in other parts of the country, tithes accounts take up the crown's portion of tithes as a rule, but especially the lists from the Torneå parishes sometimes mention the total tithes, which has been noted in the database's harvest estimates (see below).

Orphanage barrel

During the whole period of investigation, Västerbotten county paid the so-called Orphanage barrel with one fortieth of the crown's unreduced tithes, thus completely according to the regulations. Its bailiwick sums have had to fill gaps in the crown accounts.

Tithes system

The Crown tithes' proportion of the total tithes deviates partly from what applied in the rest of Sweden: from and including at least Johan III's time (king 1569-1592), the clergy in Västerbotten kept 2/3 of the tithes. Through a royal letter on 9 September 1690, one of the thirds was withdrawn however.¹⁹⁹ That meant that the Crown tithes before 1690 corresponded to 1/3 of the total tithes. From and including 1690 and throughout the rest of our period, the crown kept 2/3 of the tithes in the whole county except for Kalix pastorat and Burträsk, Bygdeå and Lövånger parishes, where the Crown tithes remained 1/3.

Test threshing was already implemented at the beginning of the period of investigation in 1665 in the province.²⁰¹ However, in Norrland there were also other drying methods than setting up stooks etc. The drying method on racks made "rök"-counting impossible. Tithes were therefore estimated in Över- and Nedertorneå by "guessers".²⁰²

Rack drying has been described in the following way: "In Sweden racks (Sw. hässja) are used generally consisting of rack poles pegged in the ground in rows in which sticks are fastened and on them, rack rods are balanced, over which the grass is laid. The space between two poles is called a floor ("golf"). However, in Västerbotten a special form was developed in due course, the so-called Västerbotten racks, with roof, a kind of airing passages, often built next to the threshing barn."²⁰³

encountered at the Härnösand regional National Archives, which does not exclude the possibility of their existing somewhere else.

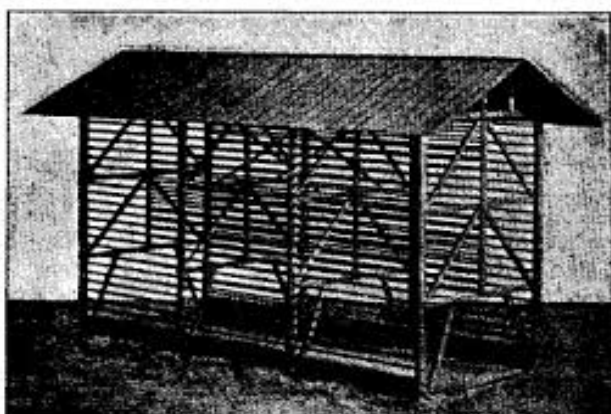
¹⁹⁸ Häradskrivarens i Skellefteås fögderi arkiv, vol 474, HÄL.

¹⁹⁹ Rabenius 1853, p.48, Thurgren 1859, p. 37, Lars Gustaf Linde 1887, p. 297, Forssell 1872-1883, p. 49, n. 2, Forssell 1884, appendix Litt A, p. 128, Huss 1902, pp. 66-73.

²⁰¹ Sometimes Västerbotten's town tithes lists lack information on stooks. One may then suspect that they have instead estimated tithes from accounts from the stook toll, "skyltullen", which the townspeople had to pay when bringing their dried harvest into the town.

²⁰² SAOB under "skyl".

²⁰³ Nordisk Familjebok, Uggleupplagan.



”Västerbottenshässja”, illustration from *Nordisk Familjebok*, Uggleupplagan.

At the beginning of the period, at least in 1665-1667, “grain houses” (Sw. kornhus) are mentioned in the county’s tithes accounts, **in 1647 one in the town of Piteå and one in Umeå**. It was a charge in grain intended to be stored for years of need that was decided in 1643: every tenth barrel of the Crown tithes in the northern towns and villages must be allocated and tithes were to be accounted for once this had been withdrawn.²⁰⁴

Fixed tithes settings

In 1754, the transition to fixed tithes in the county began parish by parish starting in Piteå, a process that was concluded with Löfvånger in 1773. After 1757 only Löfvånger and Bygdeå with Nysätra continued with harvest-dependent tithes. These parishes were followed in the database until they were also given fixed tithes, Löfvånger in 1765, Bygdeå with Nysätra in 1772.²⁰⁵

The barrel as measuring unit, measuring method, excess measures

In 1665, the tithes extracts show at the end the excess measures on the grain kept by the crown. A control counting shows that they are based on “Sum kept” as stands above. This means that all the figures in the extract refer to levelled-off barrels. That the extract figures refer to barrels in levelled-off measures emerges also from the extracts in 1666-1671. In 1690, levelled-off barrels are also summed up and the tithes lists’ figures are the same as in the extracts; in a special account, the excess measures are shown separately.

The 1739, 1741 and 1751 crown accounts have been investigated to see how the new regulations of 1739, on among other things excess measures, possibly changed tithes accounting for the county. Västerbotten’s tithes extract continues from and including 1739 to designate “all incoming tithes” with the same number of barrels as in the tithes lists themselves estimated from the test threshing etc. It emerges explicitly that the customary reductions were delivered with excess measures, which meant that also the extract’s “incoming” tithes sums must have been with excess measures.²⁰⁶ The conclusion is that the Västerbotten peasant farmers at that time when delivering to the tithe barns had had to hand in 4 kappes in excess measure, without this being named explicitly in

²⁰⁴ Sandbergsska samlingen, V816-46, ÄÄ3390, RA. For how long the Norrland grain houses remained and how the “kornhus” charge possibly affected the tithes sums that are accounted for in the database has not been possible to clear up within the framework of the project.

²⁰⁵ Löfvånger may have temporarily got fixed tithes in 1757.

²⁰⁶ See among other things the extract for the Second bailiwick in 1739. For certain tithes recipients, 4 kappes excess measure per barrel were returned to the crown, the 1739 new excess measure, and for others the excess measure was estimated as before with 2 kappes.

the extract. The extract's number of incoming barrels were thus with excess measures, but numerically as many as the tithes lists' levelled-off barrels.

Measuring vessels' volume, measuring barrel

The usual measurements in Västerbotten's Crown tithes accounts are barrels, "skäl" and kappes.²⁰⁷ The skäl was the same as the Swedish firkin, 1/8 of a barrel.

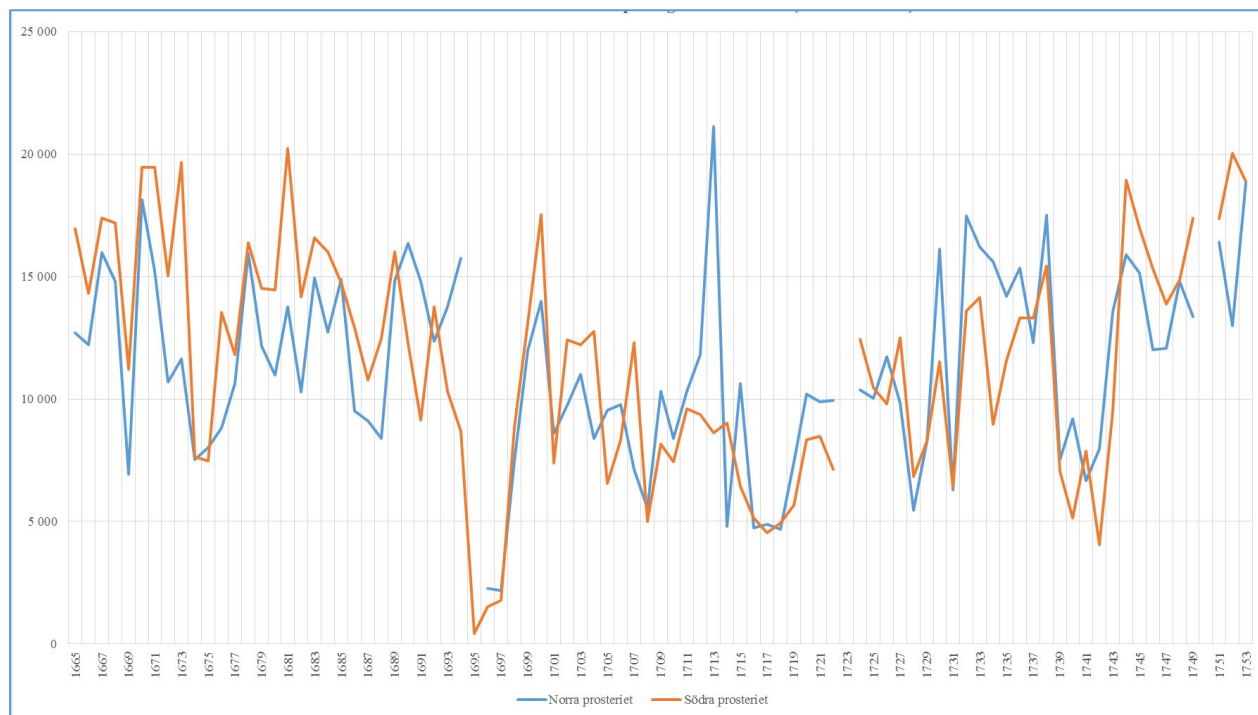
Harvest estimates

Harvest estimates have been made according to the parish-wise tithes information and when this is lacking from bailiwick and two county sums. The estimates can be seen in the database page "Totalstatistik SND". In the parish column for the "parishless" years, the unit "bailiwick sum" (Sw. fögderisumma) has been added and for 1723 and 1750 where even the bailiwick information is missing, just "county sums" (for the then county). When estimating the harvest, consideration has had to be taken to the fact that Crown tithes were issued with different proportions of the total tithes between various periods and parishes as well as the fact that certain years' tithes information referred to the total tithes before division between clergy and crown.

When the bailiwick information was collected from the Orphanage information, the tithes were multiplied by 40 using the usual method to correspond to the Crown tithes. For the years before 1690, I have assumed that Crown tithes from all the parishes corresponded to 1/3 of the total tithes. However, since the division between clergy and crown came to vary among the bailiwicks' parishes from and including 1690, a simplification has been needed when estimating the harvest: the crown's proportion per bailiwick has been represented by an unweighed average figure of the crown's proportions in the bailiwicks' parishes – for the Southern bailiwick 1.4, and for the Northern bailiwick 1.8. A rough estimation of the proportion of tithes-exempt farms has been made according to the tax assessment units, the mantals, in the 1680 cadastre for Västerbotten in the National Archives and for the vicarages according to Westerling's compilation from 1838. I have thereby assumed that the vicarages (in contrast to so-called "stommar" crown farms assigned to support the parson) are not included in the 1680 cadastre's mantals. As usual, a further markup of 10 % has been counted in to balance roundings-off downwards at the tithes estimation (see introduction). The results of the harvest estimates at bailiwick level are shown in the following diagram:

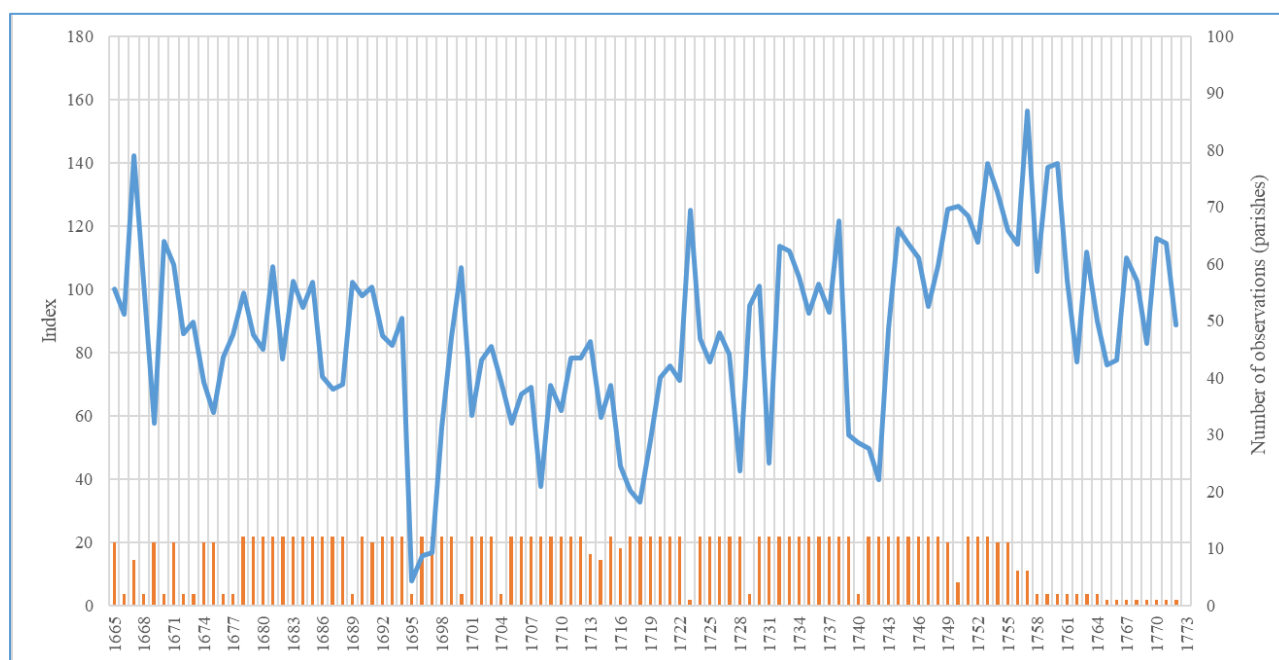
²⁰⁷ One exception from kappes is shown by the county's towns, where Swedish pottles occurred at least during some periods. Since in the database we use parish figures of often hundreds of barrels, such possible ambiguities play no important part, a kappe was 0.03125 and a Swedish pottle 0.01786 of a barrel. The Orphanage seems to have transferred from kappes to Swedish pottles from and including the harvest year of 1685, to which consideration has been paid in the database.

Estimated harvests in Västerbotten county per bailiwick in 1665-1753 (barrels of reduced grain)



A harvest index with the base in 1665 has been added to the database (based on the file "Skördeindex SND"). It is founded on the average figures of the harvest information that has been collected. In order that the towns' inconsiderable agriculture should not influence the average figures disproportionately, their tithes have been left out of the calculation. The index is shown below in the diagram where also the number of observations on which the index is founded has been added. That there are sometimes few observations pre-1750s is because they are founded on bailiwick figures, and at the end of the series because only a few parishes then still kept harvest-dependent tithes. The curve's representativeness from and including the 1750s must be interpreted with great caution. We know as yet nothing about these parishes' representativeness for the whole county.

Harvest index for Västerbotten 1665-1772 (1665 = 100) and its base in numbers of observations



Note: observations bailiwicks

Crises

In the Orphanage main ledger for the harvest years 1695-1696, no information is provided from Västerbotten. In the main ledger for 1698, for the 1697 harvest year, there are explanations: from the northern bailiwick, the bailiff writes in 1695 that "not a single grain was produced in the whole bailiwick, but everything was frozen by the bitter cold that occurred when the grain was at best in ear. For the harvest year 1695, orders had been sent out to continue with test threshing in Umeå parish, "but that was – God better – for our sins' sake a severe year of bad harvest and a very bad year ... especially for this year's growth, so in this parish, despite all possible effort, no test could be done, while we did not get the smallest amount of grain for food and livelihood, even less grain for sowing, that is serviceable and wholesome, having in the greatest part rejected the whole of the year's growth as being like hay, after which nothing else except frozen chaff can be retained, ... unable therefore to write and establish any church tithes list for this year, which we poor taxpayers regret not without bitter tears, ... for us and our poor relatives nothing else remains before our eyes than death through starvation. For neither fish out of the waters nor bird from the forests can be taken for human beings' livelihood ...".²⁰⁸

²⁰⁸ Stockholms barnhus, huvudbok 1698, s. 720, SSA.

The summary of incomes and costs verifications' extract from the northern bailiwick's Piteå in 1695 states that "the harvest partly through the wet and partly of perpetual cold before maturity" had been destroyed, but from other parishes, only "cold" is mentioned.

The 1695 verifications for Umeå in the Southern bailiwick state: "Starvation is standing at the door, no estimate has been made, the whole crop had to be mowed as hay, just frozen chaff"; from Bygdeå "only death through hunger remains for us, our wives and children"; from Löfvånger "cold has destroyed the whole harvest before the kernels or ripeness"; from Skellefteå "hasty severe cold and unnatural wetness" and "only ... the husks can be mixed with bark".²⁰⁹

In 1696, the entire yearly growth in the Northern bailiwick was only 123 barrels, 6 skäls and 2 Swedish pottles, the grain was also poor; in 1697 the entire harvest only added up to 127 barrels. However, both years, most of the tithes were left to the poor peasantry "on account of the difficult times".²¹⁰ From Löfvånger, the tithes for 1696 are said to have added up to 11 barrels, 4 skäl and 3 Swedish pottles "poor and frozen grain destroyed by rain and frost during this regrettably long bad year...". In Skellefteå and Burträsk parishes, tithes were destroyed by "frost and nonstop rain". "Poor and mostly bran and husks".²¹¹ The extracts give the information for the town of Luleå in 1696 that "no grain suitable for human food has been harvested, the grain for sowing has been destroyed by cold and bad weather before it came to ripeness; in Umeå and Bygdeå, the harvest is said to be destroyed by cold and wetness, in Burträsk tithes have been weakened by cold and rain in this "long time of bad year".²¹²

In 1697, the county accounts for Luleå parish mention that the peasantry has eaten "empty husks and green straw ... before the test was carried out". However, not only cold and rain caused bad harvest – some villages had "received grain from southern regions that was completely destroyed on account of the long drought that happened last summer".²¹³

Other years, bad harvests occurred now and then on account of cold, e.g. 1665 and 1682. In 1669, the rye in Piteå did not ripen, in 1708 Överkalix had frost as late as at midsummer.²¹⁴ If cold had not destroyed harvests generally it emerges from the tithes lists that single farms might have their harvests frozen now and then anyway. In the Southern bailiwick, grain was said to be "weak and frozen" in 1675 and in Northern bailiwick in 1698 "everything frozen to bits of the severe cold ... when everything stood in its best ripeness".²¹⁵

During the Great Nordic War, Russian troops made several landings on the coast. On 20 September 1714, they burned the town of Umeå since the Swedish troops had abandoned the town. The tithes accounts mention that "the murdering Russian has destroyed the town" after which the Finnish part of the Swedish army had arrived and taken the tithes and their horses ate up the gardens. In the winter of 1718, the Russians once again destroyed the town and on 22 May 1720 the rebuilt town was again burnt down and, finally, on 8 June 1721 even the temporary buildings that had been put up.²¹⁶ In Kalix and Torne parishes, no tithes estimates (tests) were carried out in 1714 since the grain was immediately threshed and eaten by the Finnish army. In 1716, Russian troops once again entered these parishes and "ruined" them.

²⁰⁹ Länsräkenskaper, Västerbottens län 1695, RA.

²¹⁰ Stockholms barnhus huvudbok 1698, s. 714, SSA.

²¹¹ Stockholms barnhus huvudbok 1698, s. 718, SSA.

²¹² Länsräkenskaper, Västerbottens län 1696, RA.

²¹³ Länsräkenskaper, Västerbottens län 1697, RA.

²¹⁴ Länsräkenskaper, Västerbottens län respektive år, RA.

²¹⁵ Notes in the Stockholm barnhus huvudbok, 1677, 1698, SSA.

²¹⁶ A well-documented history of Umeå can be found on the Internet: <http://sv.wikipedia.org/wiki/Umeå> (2016-02-11).

Tithes in Västerbotten county 1665-1772 (index 1665 = 100)

Year	Index	Number of observations
1665	100	11
1666	92	2
1667	142	8
1668	102	2
1669	58	11
1670	115	2
1671	108	11
1672	86	2
1673	90	2
1674	70	11
1675	61	11
1676	78	2
1677	86	2
1678	99	12
1679	86	12
1680	81	12
1681	107	12
1682	78	12
1683	102	12
1684	94	12
1685	102	12
1686	72	12
1687	68	12
1688	70	12
1689	102	2
1690	98	12
1691	101	11
1692	85	12
1693	82	12
1694	91	12
1695	8	2
1696	16	12
1697	16	12
1698	56	12
1699	85	12
1700	107	2
1701	60	12
1702	77	12
1703	82	12
1704	71	2
1705	57	12
1706	67	12
1707	69	12

1708	38	12
1709	70	12
1710	62	12
1711	78	12
1712	78	12
1713	83	9
1714	60	8
1715	69	12
1716	44	10
1717	36	12
1718	33	12
1719	52	12
1720	72	12
1721	76	12
1722	71	12
1723	125	1
1724	84	12
1725	77	12
1726	86	12
1727	79	12
1728	42	12
1729	95	2
1730	101	12
1731	45	12
1732	114	12
1733	112	12
1734	104	12
1735	92	12
1736	102	12
1737	93	12
1738	121	12
1739	54	12
1740	51	2
1741	50	12
1742	40	12
1743	87	12
1744	119	12
1745	115	12
1746	110	12
1747	94	12
1748	107	12
1749	125	11
1750	126	4
1751	123	12

1752	115	12
1753	140	12
1754	131	11
1755	118	11
1756	114	6
1757	156	6
1758	105	2
1759	138	2
1760	140	2
1761	103	2
1762	77	2
1763	112	2
1764	90	2
1765	76	1
1766	77	1
1767	110	1
1768	102	1
1769	83	1
1770	116	1
1771	115	1
1772	89	1

Variables in the database "Västerbotten"

The page "Totalstatistik SND"

År = Year

Fögderi = Bailiwick

Socken = Parish

Källor = Sources

Anmärkning = Remarks

Rågtionde decitunnor = Rye tithes in decibarrels

Korntionde decitunnor = Barley tithes in decibarrels

Spannmål decitunnor = Grain (rye + barley) tithes in decibarrels

Tionde i ren säd = oreducerade tunnor = Tithes in reduced grain (rye + barley), (here) = unreduced barrels

Totala tiondet i decitunnor ren säd = Total tithes before being divided between priest and Crown, decibarrels reduced grain

Index 1665=100

Rågskörd i decitunnor = Rye harvest in decibarrels

Kornskörd i decitunnor = Barley harvest in decibarrels

Spannmålskörd (råg + korn) i decitunnor = Grain harvest (rye + barley) in decibarrels

Skörd i oreducerade decitunnor = Harvest in unreduced barrels

Total skörd i decitunnor ren säd = Total harvest in decibarrels reduced grain

The page "Skördeindex SND"

År = Year

Medel av Index 1665=100 = Average of indexes, 1665=100

Antal observationer = Number of parish observations

Key to sources

Häradsskrivaren i Skellefteå fögderi, vol. 474, Härnösands landsarkiv

Norrbottnens läns landskontor Eic:2, Härnösands landsarkiv

Norrbottnens läns landskontor, Elc:1, Härnösands landsarkiv

Länsräkenskaper Västerbottens län, landsbok, RA.

Länsräkenskaper Västerbottens län, verifikationer, RA.

RA = Riksarkivet

SSA = Stockholms stadsarkiv

Stockholms barnhus, huvudbok, SSA

”Västernorrland” - Gästrikland, Hälsingland, Medelpad and Ångermanland

Martin Linde

Administrative divisions

In 1665-1761, these provinces were included in – the former –Västernorrland county. This was divided in 1762 partly into Gävleborg county, consisting of Gästrikland, Hälsingland and Härjedalen, and partly the more recent Västernorrland county, consisting of Medelpad, Ångermanland and Jämtland. Even the former Västernorrland county might sometimes be called Gävleborg county. In 1810, Jämtland and Härjedalen were broken out and formed Jämtland county. The concept Västernorrland has thus varied over time. The towns in the provinces were Gävle, Hudiksvall, Härnösand, Sundsvall and Söderhamn. Jämtland and Härjedalen are treated in a separate chapter.

Source materials

The parish-wise source materials for the area in the National Archives’ county accounts proved to have significant gaps. Of the materials preserved, much was damaged. This concerned the verifications for 1665, 1668, 1669, 1673, 1678, 1681, 1687, 1688 and the summary of incomes and costs for the years 1665, 1680 and 1687. With special permission, the project was however given access to some of these volumes.

The restructuring of the county divisions has brought with it that the county governments’ i.e. county accounts offices’ tithes material has been split up in different regional **National** archives. During the county divisions in 1762 and 1810, the old verification books among others were broken apart and parts of their contents distributed among the new counties. This means that we have been forced to search for tithes information in several regional state archives.

In Härnösand’s regional state archives, Västernorrland and Gävleborg county accounts offices’ archives are to be found with summaries of incomes and costs and verifications for a large number of years from 1679 and onwards. The two county governments also made special collections of tithes information.²¹⁷

Which gaps still remain in the parish materials? For the years 1665-1669, 1671-1672 and 1674-1677, almost all parish materials are missing among the crown’s accounts, and for a smaller number of parishes the corresponding information has been fetched from other sources, see below. Apart from that, all years with harvest-dependent tithes have been possible to add to the database.

I have not made any attempts to make estimations for the gaps in the parish information. For the period of investigation, the yearly tithes development is easier to study at the bailiwick level and is mainly calculated from the so-called Stockholm Orphanage barrel (see the report’s introductory chapter). For the time from 1716 and onwards until fixed tithes were introduced, the information on bailiwick development has been taken from the parish figures produced.²¹⁸

The big gaps among the tithes accounts have led to further searches for materials:

Hälsinge regiment’s tithes

By chance, a tableau with tithes information for 1679-1688 for 24 parishes in Hälsingland and Gästrikland was found, allotted to Hälsinge infantry regiment. The line-up is said to show “church

²¹⁷ Gävleborgs läns landskontor, GIIId, (1695-); Västernorrlands läns landskontor, GIIIk (for occasional years 1696-), GXa (for occasional years), HÄL.

²¹⁸ Years when these have been incomplete have as far as possible been replaced by bailiwick sums from the crown accounts.

tithes” “since the Orphanage 40th part has been withdrawn”. A comparison with the county accounts (for a number of years) shows, however, that the “customary reductions”, the tithes reductions, the clergy remuneration, the provost barrel etc. had been taken from these tithes amounts. Through a supplement of the Orphanage barrel and the “customary reductions”, fetched here from the tithes extracts in the county accounts for 1683 (they remained unchanged for a long time), tithes in their totality for these parishes have been reconstructed.²¹⁹

Uppsala academy's tithes

After her work with the thesis ”Akademiens spannmål”, Astrid Hegardt deposited her excerpts of Uppsala academy's tithes collections in 1655-1719 from among others the Hälsingland parishes Alfta, Järvsö, Bollnäs, Segerstad, Delsbo and Hanebo at the Uppsala University department of economic history.²²⁰ When this information can be compared with the crown's county accounts these turn out to be in accordance with the unreduced Crown tithes.²²¹

Orphanage barrel

Information about the “Orphanage barrel” – see the report's introductory chapter – have been found at the bailiwick level from and including 1665 in the Orphanage archives. They have up to and including 1715 together with other bailiwick information been carried over to a special file in the database (see below).²²² For the three years 1665-1667, the Orphanage materials for the area are hard to interpret. In those cases summaries of incomes and costs or verifications with more reliable information in the National Archives have been used, rather than the bailiwick file.

From the Västernorrland summary of incomes and costs in 1667 in the National Archives, it is clear that the Västernorrland Orphanage barrel was counted as 1/40 of the crown's unreduced tithes, that is, completely in accordance with the regulations.²²³

Other archives

In the Gävleborg county accounts office's archives in Härnösand, a parish-wise list was found over the clergy's proportion of the tithes in 1667-1686 in Hälsingland's southern contract; it is attached as a facsimile.²²⁴ It has however not been used for the database since, unlike the database, it is structured in accordance with parishes which include a group of congregations, not just a one-congregation parish. It is possible that various other archives can fill some of the gaps in the county's tithes series.²²⁵ It has however not been possible, considering the magnitude of the task, to investigate them within the framework of this project.

²¹⁹ Länsräkenskaper, Västernorrlands län, 1683, RA. From the extract it is clear that tithes included excess measures.

²²⁰ Hegardt 1975: the excerpts are stored at the Ekonomisk-historiska institutionen, Uppsala universitet.

²²¹ The academy had its own bailiffs who took care of the tithes and by all accounts delivered the usual reductions to their various recipients. The academy's tithe collection organisation is described by Hegardt 1975, p. 29 f. From her work, one gets the impression (p. 27) that the academy received its allotted tithes after withdrawal for the customary reductions, which cannot however be the case. It is confusing in this context that these reductions are accounted for in the county accounts' extract.

²²² Stockholms barnhus arkiv, Huvudböcker, SSA.

²²³ Länsräkenskaper Västernorrlands län, landsbok 1667, ss. 119, 147), RA.

²²⁴ Gävleborgs läns landskontor, GVf:1. The information has not been used in the database, except for Skogs, which was an independent pastorship (that included several parishes).

²²⁵ Substantial parts have been preserved in the National Archives in Stockholm or the regional state archives. The Hälsinge regiment's archives in KrA, the State Archives and HÅL might have information about the parishes whose tithes were allocated to the regiment. Several district scribe archives (häradskrivarkiven) have also been preserved in the National Archives that may perhaps provide some information (often special series with tithes material!): Medelpad (1689-), Gästrikland (1691-), Södra Hälsingland EIV1-5, (1689-); HlB 1 etc, (1660-), N. Hälsingland 9 b: 208a (1685-); 179 (1739-) 181b (1779-); S Ångermanland vol 196, 197; N. Ångermanland has long tithes lists from 1737 and onwards.

Tithe system

For Gästrikland, Hälsingland, Medelpad and Ångermanland, the system was mainly the same as in their southern neighbouring provinces, i.e. the crown took 2/3, and the parson 1/3 of the tithes. In Nätra, Ångermanland, the parson however kept half of the tithes, and in Grundsunda, Anundsjö and Nordmaling 2/3.²²⁶

It emerges from the State Archives summary of incomes and costs verifications for the county in 1667 and later crown accounts that farm-wise sample threshing occurred very frequently in these provinces.

Fixed tithes settings

With the exception of Ockelbo parish, Gästrikland introduced fixed tithes in 1745. This is clear from the following years' accounts. "Ugglebo", Ockelbo, is taxed after test threshing until and including 1748, after which this parish too was given fixed tithes.²²⁷

In *Hälsingland's southern bailiwick*, Skog, Södervåla, Arbro, Undersvik, Mo, Rängsjö, Norrala and Trönö parishes were given fixed tithes in 1745, and the rest – Segersta, Hanebo, Bollnäs, Alfta, Ovanåker and Järvsö – continued with harvest-dependent tithes until these too got fixed tithes in 1752. They seem however to have renegotiated the agreement in about 1760. In 1762-1775 I have assumed that Alfta and Järvsö once again had harvest-dependent tithes and I have added their tithes amounts to the database.²²⁸ For these two there are also figures for 1780-1781.

In *Hälsingland's northern bailiwick*, in all parishes except Delsbo, fixed tithes were introduced in 1745. Delsbo continued with harvest-dependent tithes according to "the test threshing lists". In 1752 however, Delsbo agreed together with six parishes in Hälsingland's southern bailiwick, paying fixed tithes to Uppsala academy, to which their Crown tithes were allotted.²²⁹

Medelpad's bailiwick was probably given fixed tithes in 1773. However, in 1774 all parishes except Torp, Haverö, Indal, Alnö, Timrå and Tynderö returned to harvest-dependent tithes, and switched in 1775 once again to fixed "after agreement". The only clear exception is Alnö that has an ordinary tithes list.²³⁰ In 1776, Attmar, Torp, Borgsjö, Selånger, Indal, Alnön, Timrå and Ljustorp had harvest-dependent tithes. In 1777, Attmar and Alnön had also been given fixed tithes. It is possible that some of the harvest-dependent tithes were only partly harvest-dependent. No figures after 1772 have been added to the database.

Ångermanland's southern bailiwick started with fixed tithes in 1764. The parishes of Ramsele, Fjällsjö, Edsele, Helgum (=Ramsele parish group) and Vibyggerå continued however with harvest-dependent tithes until and including 1772, Junsele right until and including 1775. The transition to fixed tithes was not general, and some peasant farmers continued with harvest-dependent tithes at least till 1820. In the accounts for the bailiwick in 1820, the "sum for those at tithes setting had

²²⁶ Lars Gustaf Linde 1887, § 145.

²²⁷ In the preamble to the Ockelbo tithes setting list for 1749 (p. 1587) there is a reference to a government decision in 1727 and 1734; it also says how tithes shall be paid from 1745 and onwards. Gästrikland's tithes material has been investigated until and including 1820.

²²⁸ The parish of Bollnäs possibly renegotiated its fixed tithes sometime in 1771-1774. Tithes material for the bailiwick has been investigated until and including 1820.

²²⁹ Around 1790 the bailiwick might temporarily have reverted to harvest-dependent tithes, at least six of the parishes (Enånger, Njutånger, Bergsjö, Ljusdal, Färila and Hogdal). "Sammandrag öfver föregående tiondelängder" is the title of the material in 1791. Perhaps it is only a case of renegotiation. However, in the 1795 extract and in the 1796 summary of incomes and costs tithes setting lists are mentioned. Considering their uncertainty, the figures have not been included in the database. Tithes material for the bailiwick has been investigated until and including 1820.

²³⁰ Hereafter, small variations in the amounts can sometimes occur from one year to another, but it is unclear how these should be interpreted. Maybe it has something to do with the taxation of recently included farms. In the database, considering all the uncertainties, I have chosen to include all tithes information until and including 1772, those for the six with harvest-dependent tithes until and including 1774 and Alnö until and including 1775. Tithes material for the bailiwick has been investigated until and including 1820.

remained”, but also the sum “for those who have undergone stook-counting and sample threshing”. This implies that by investigating those farms which kept harvest-dependent tithes, the tithes series could be continued into the 1800s. This would however be a finicky job that has not been possible within the framework of this project.

Ångermanland's northern bailiwick's parishes had harvest-dependent tithes at least until and including 1759; the only exception was Nätra parish that kept fixed tithes “According to Agreement” in 1749 and 1750. A tug-of-war about which tithes system to use seems to have taken place for a long time. In 1760, Själevad, Grundsunda and Nordmaling got fixed tithes, but in 1764 Själevad returned to harvest-dependent tithes and from and including 1765 the whole bailiwick once again had harvest-dependent tithes. A comparison between the 1773 and 1774 summaries of incomes and costs show that Sidensjö, Själevad, Grundsunda and Nordmaling then had the same figures both years, i.e. they now had fixed tithes, in contrast to the others. In 1773, the entire bailiwick seems to have got fixed tithes with the exception of Nätra, Anundsjö and Arnäs that continued with harvest-dependent tithes according to the test threshing lists. Nätra and Arnäs continued with harvest-dependent tithes until and including 1775, Anundsjö until 1780. The other parishes had fixed tithes at least until and including 1820.²³¹

The barrel as a unit of measurement, the measuring method and the excess measures

In order to grasp the problems of reconstructing the tithes, we also have to consider the units of measurement that were used. The crown accounts before 1739 show the excess measures as a separate appendix in the extracts. The extracts' parish-wise tithes sums thus refer to tithes in levelled-off measure. The change in measuring method that was ordered in 1733, whereby barrels before excess measures should also be shaken and shovelled, in contrast to the 1638 regulations on only levelled-off barrels, has not left any traces in the source materials we have studied during the period this method of measuring was applied, that is until and including 1736. The return to levelled-off measures before excess measures during 1737 and 1738 has not done so either.²³²

When new regulations about excess measures were introduced in 1739, tithes accounts for the county, within the county borders of that time, were changed. The extracts' tithes sums have the heading “main collection in loose and levelled-off measure with 4 kappes to the barrel”. The extracts' tithes amounts thus refer to barrels with excess measures, so-called “avradsmål” or “fixed measures”.²³³ From and until 1740, the extracts are very homogenous in structure and have similar headings. How then should the tithes lists' final sums and the extracts' corresponding sums be interpreted? Should the excess measures possibly be left out? If we return to the tithes lists, we see that for example Erik Pålsson in Bjerme, Sättna parish, in 1749 had a yearly growth of 15 stooks of rye, which according to the sample threshing column each had a yield of 4 kappes.²³⁴ The whole yearly growth is thus equivalent to 60 kappes. From this, one tenth was to be withdrawn for tithes, i.e. 6 kappes. The parson was to have 1/3 of those, thus 4 kappes remained that in the tithes list are registered as the Crown tithes for him. This probably means a kappe vessel that was equivalent to 1/32 levelled-off barrel, a vessel that was used on most peasant farms. The fact that the extracts include as great a number of barrels numerically as the tithes lists, is due to the fact that the levelled-off barrel, for example, that a peasant farmer was taxed for, during tithes collection had been poured into a collection barrel that was 4 kappes larger than the peasant's own traditional barrel. His taxed tithes would thus not have sufficed to fill this collecting barrel without his having to pour in more grain equivalent to the 4 kappes' excess measure. (In the tithe barn even the smaller measure's

²³¹ Tithes material for the bailiwick has been investigated until and including 1820.

²³² See Morell 1988, p. 41 ff.

²³³ See Morell 1988, p. 42.

²³⁴ ”Wid Sädes-bärgningen sättas (i södra Västerb.) mäst snesar eller skylar, och räknas 12 små band på en skyl, men 30 skylar på en Rök”. Hülphers, Abraham Abrahamsson, *Samlingar til en beskrifning öfwer Norrland*, Femte samlingen om Westerbotten 1. bandet. Westerås 1789, sid. 35.

vessels should have existed). These extracts' figures should therefore from our point of view be interpreted as levelled-off barrels of tithes, and no excess measure should be withdrawn.

However, the change had already been introduced in the 1739 extract. No special accounting for the excess measure in a separate post, as was made until and including 1738, was done anymore. However, there seems to have been some uncertainty about the new arrangement. For some reason, the barrels measured from the peasant farmers in the tithes lists have been listed with a reduction of 2 kappes per barrel.²³⁵ A new, lower sum has thereby been received and it is this latter that later in the extract has been written down under the heading "main collection of loose and levelled-off measure with 4 kappes per barrel". Despite the reduction mentioned in the lists, I have interpreted the 1739 extract sums in the same way as in the following years, since the extract according to its heading includes 4 kappes' excess measure, just like the following years' extracts.

When parish figures have been taken from Hegardt's excerpts from the archives of Uppsala Academy, they correspond well with the crown accounts' tithes lists. The extracts that include excess measures have been treated in the same way in both sources. The same goes for information from the Hälsinge regiments and the series in 1667-1686 for southern Hälsingland.

As for the Orphanage barrel, it should be noted that the Orphanage was allowed to keep the excess measure. In the Orphanage accounts for Västernorrland county, most years during the period 1665-1715 show "the over measure" of 3.5 Swedish pottles per barrel, as a separate post.²³⁶ Converted to kappes – 2 – this corresponds to the excess measure according to valid regulations. On some occasions, the same over measure is called "excess". For a number of years, the Orphanage accounts are registered in "full measure". This is the case in 1692, 1696-1700 and 1704-1712.²³⁷ The ambition to make the database's series uniform has raised the question of whether the barrels in "excess measure" should be interpreted here as a) numerically the same as the tithes lists' number of levelled-off barrels, but when delivered in the tithe barn collected in bigger barrels that include the excess measure that the peasant farmers were forced to add upon delivery; or b) the tithes lists' levelled-off barrels converted to larger barrels (the volume of which included the excess measure) and thereby fewer than the tithes lists' barrels. Comparisons with the extracts of the crown accounts in the National Archives show that a) provides the best correspondence between the crown's bailiwick figures excluding the excess measure and the sums obtained by multiplying the Orphanage information by 40. Calculations from the Orphanage figures headed "in excess measure" have thus numerically corresponded to the information in levelled-off measures!²³⁸ In other words: both the database's parish and bailiwick figures refer to levelled-off barrels.

Measuring vessels' volume, measuring barrel

²³⁵ In 1740 and all following years no kappe reduction was made in the lists and their final sums are the same as the sums in the extract.

²³⁶ Sometimes, however, Hälsingland's fee is registered without any special post for the excess measure, despite the fact that all other bailiwicks' fees in the county are given with specified excess measure. On 5 November 1675, an agreement was concluded between the Orphanage direction and the peasantry on fixed charges for 1675, 1676 and 1677 Orphanage barrel, all counted with excess measure. General Orphanage ledger (Allmänna barnhusets huvudbok) for 1676 s. 953.

²³⁷ In 1701-1703, the measure is not stated, but I assume that like the neighbouring years it is "full measure".

²³⁸ A note by the Västernorrland county information in the Orphanage accounts for the 1692 harvest states that "The peasantry in Jämtland and Härjedalen exchange ... the Orphanage grain (for money)..., and reduced to levelled-off measure...". Thereafter, the sum is given "reduced" to levelled-off barrels. Comparing this with the stated "full measure" sum gives the proportion 34/32. However, at the same time "the full excess measure" of 3.5 Swedish pottles per barrel is shown separately and after the various bailiwicks' totals (even Jämtland's and Härjedalen's). Strangely enough, it is the amount before the excess measure addition that is later "reduced". The agreement referred to on payment in money had moreover been decided in February 1683. Other similar agreements also occurred. On 5 November 1675, an agreement was thus made between the Orphanage direction and the peasantry about a fixed exchange price for the 1675, 1676 and 1677 Orphanage barrel, all estimated with excess measure. General Orphanage ledger (Allmänna barnhusets huvudbok) for 1676 s. 953.

In 1665-1740, the crown counted tithes in barrels, Swedish firkins and Swedish pottles in the provinces treated here. After that, they changed from Swedish pottles to kappes as the smallest measure. The transition occurred in each bailiwick: in 1741 Gästrikland, in 1742 Södra Hälsingland, Medelpad and Norra Ångermanland, in 1745 finally Northern Hälsingland and Southern Ångermanland.

Harvest estimates at bailiwick level

In this project, harvest estimates for Västernorrland have only been carried out at bailiwick level. In 1665 and 1666 as well as from and including 1716, the tithes in the file “Bailiwick sums” have been taken from the crown accounts, and the other years from the so-called Orphanage information, see above. These tithes have then been converted to harvest estimations based on the proportion of the total tithes that was assigned to the crown – as we have seen, this could differ between parishes –, the results in turn were marked up to compensate for the tithes-exempt farms. For the sake of simplicity, I have assumed that only vicarages farms were exempt. (This certainly implies some underestimation, but we know there were hardly any manors in these areas, the largest category of exempt farms in the southern provinces). The marking up of harvests for vicarages has been done according to their mantals of land.²³⁹

For the period 1716 and onwards, bailiwick figures should be regarded as very reliable, and for the time before that, when they are based on Orphanage figures, one must on the other hand reckon with certain margins of error on account of roundings-off etc. Orphanage and crown information could of course have been merged in 1667-1715, but I have preferred here to stick to the homogenous Orphanage information.

Since the harvest estimates are made per bailiwick, it has been necessary to consider the crown’s varying proportion of tithes in various parishes. This has been done by using the unweighed average for the crown’s proportion in the bailiwick in question, for Northern Ångermanland’s part 2.0014/3, but in other parts of the area 2/3.

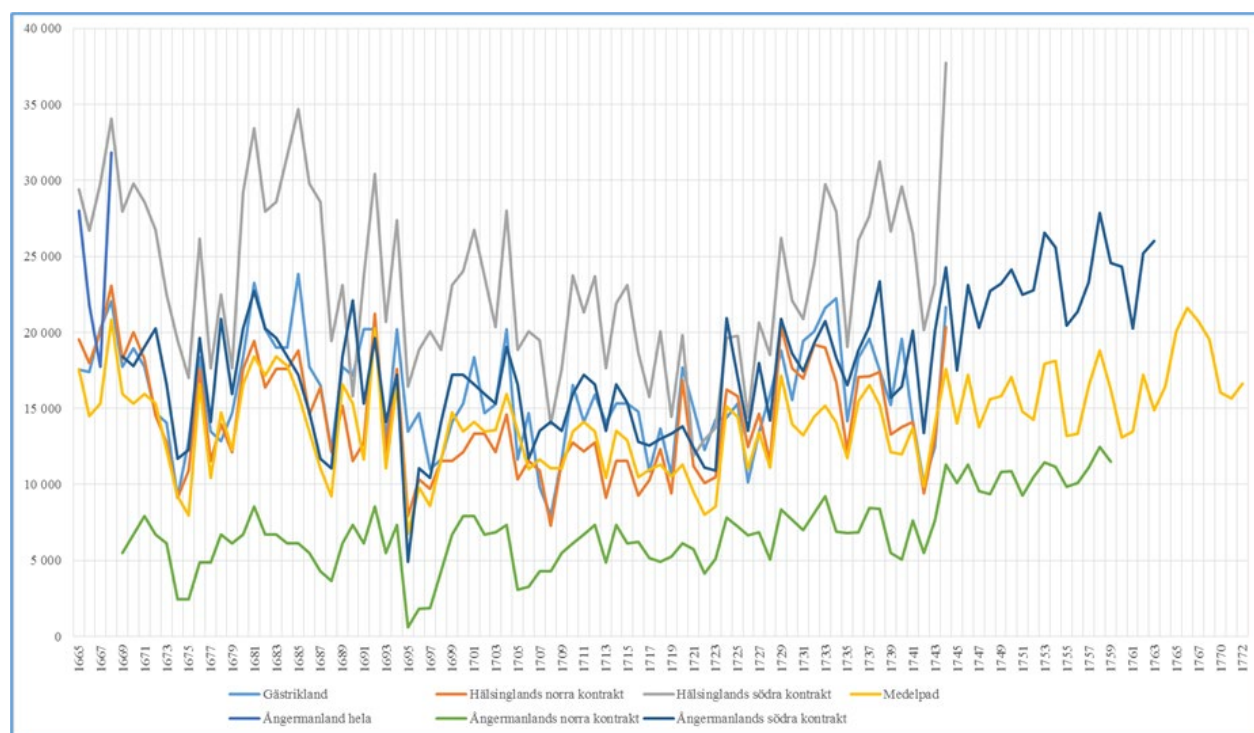
For the various bailiwicks, the database has been closed when adjustable tithes ceased. (Shorter recurrent harvest-dependent tithes periods have been excluded). The final years in the bailiwick file are thereby the following for:

Gästrikland bailiwick	1744
Hälsingland southern bailiwick	1744
Hälsingland northern bailiwick	1744
Medelpad bailiwick	1772
Ångermanland southern bailiwick	1763
Ångermanland northern bailiwick	1759 (I have disregarded Nätra’s agreement in 1749-1750 in the database, and its fixed tithes have had to supplement the information)

The results of tithes estimates are shown in the following diagram:

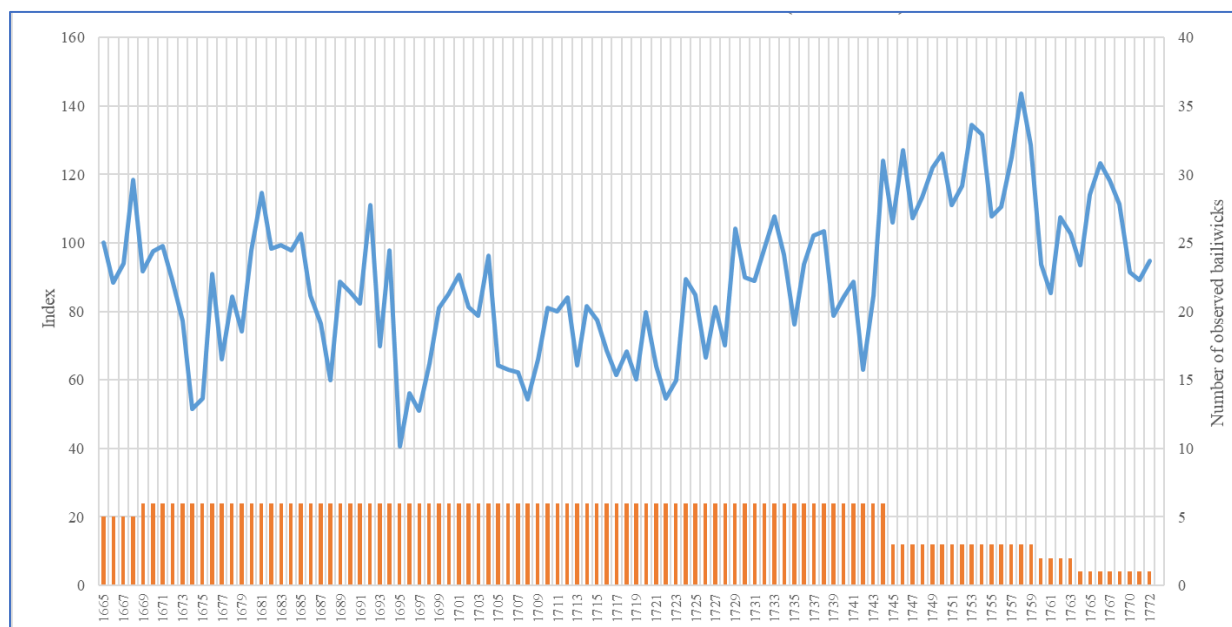
²³⁹ Taken from Westerling 1838 and af Forsell 1834.

Estimated harvests in Västernorrland's bailiwicks in 1665-1772 (barrels of reduced grain)



In the following diagram, the average index for the area under investigation as a whole is shown, based on the parishes or bailiwick information with adjustable tithes at various points in time. Here the index mentioned previously has been recalculated with 1665 as base year = 100.

Harvest index for Västernorrland county in 1665-1772 (1665=100)



Before 1669, in contrast to following years, the source materials do not distinguish between Ångermanland's two bailiwicks. For the index series that has been made from bailiwick information, the percentual division between Southern and Northern Ångermanland in 1669 has been assumed to be valid in previous periods as well.

Crises

In 1696 the county governor explained the low figures for the Orphanage barrel for the harvest year 1695: in Medelpad the bailiwick had blamed the low production results on “frost and rain”, from Southern Hälsingland it was said that “God has the previous year afflicted our dear fatherland with bad harvests, especially in the Northern lands (Norlanden), that through frost and the following rain have been damaged in their grain growth ...”. Skog and Undersvik parishes are especially mentioned; from Northern Ångermanland the provost recounted that the harvest “by frost and wet has mostly been destroyed”.²⁴⁰

²⁴⁰ Allmänna barnhusets huvudbok för år 1696 pp. 712 f., SSA.

List over the clergy tithes per group of parishes in 1667-1686 in Southern Hälsingland

[illegible]

Source: Gävleborgs läns landskontor, GVf:1, HÄL

Harvest index for Västernorrland county bailiwicks 1665-1771 (1665 = 100)

Year	Index	No. of bailiwicks observed
1665	100	5
1666	89	5
1667	94	5
1668	118	5
1669	92	6
1670	98	6
1671	99	6
1672	89	6
1673	77	6
1674	52	6
1675	55	6
1676	91	6
1677	66	6
1678	84	6
1679	74	6
1680	98	6
1681	115	6
1682	98	6
1683	99	6
1684	98	6
1685	103	6
1686	85	6
1687	76	6
1688	60	6
1689	89	6
1690	86	6
1691	82	6
1692	111	6
1693	70	6
1694	98	6
1695	41	6
1696	56	6
1697	51	6
1698	65	6
1699	81	6

1700	85	6
1701	91	6
1702	81	6
1703	79	6
1704	96	6
1705	64	6
1706	63	6
1707	62	6
1708	54	6
1709	66	6
1710	81	6
1711	80	6
1712	84	6
1713	64	6
1714	81	6
1715	77	6
1716	68	6
1717	61	6
1718	68	6
1719	60	6
1720	80	6
1721	64	6
1722	54	6
1723	60	6
1724	89	6
1725	85	6
1726	67	6
1727	81	6
1728	70	6
1729	104	6
1730	90	6
1731	89	6
1732	99	6
1733	108	6
1734	97	6
1735	76	6
1736	94	6

1737	102	6
1738	103	6
1739	79	6
1740	84	6
1741	89	6
1742	63	6
1743	84	6
1744	124	6
1745	106	3
1746	127	3
1747	107	3
1748	113	3
1749	122	3
1750	126	3
1751	111	3
1752	117	3
1753	135	3
1754	132	3
1755	108	3
1756	111	3
1757	125	3
1758	144	3
1759	129	3
1760	94	2
1761	85	2
1762	107	2
1763	103	2
1764	94	1
1765	114	1
1766	123	1
1767	118	1
1769	111	1
1770	91	1
1771	89	1
1772	95	1

Variables in the database "Västernorrland"

The page "Grunddata"

Year
County 1913
Bailiwick
Parish
Wheat tithes in decibarrels
Rye tithes in decibarrels
Barley tithes in decibarrels
Oats tithes in decibarrels
Pea tithes in decibarrels
Rye and pea tithes in decibarrels
Grain tithes in decibarrels
Total tithes in decibarrels reduced grain
Sources

The page "Fögderisummor"

Year
County 1913 (please note that Ytterhogdal and Nordmaling have wrongly been carried over to Gävleborg and Västernorrland counties respectively)
Wheat tithes in decibarrels
Rye tithes in decibarrels
Barley tithes in decibarrels
Oats tithes in decibarrels
Rye and pea tithes in decibarrels
Grain tithes (rye and barley) in decibarrels
Pea tithes in decibarrels
Tithes in unreduced decibarrels
Total tithes in decibarrels reduced grain (excl peas)
The crown's proportion of tithes
Estimated harvest in decibarrels reduced grain
Sources

Key to sources

Gävleborgs läns landskontor Elb:(volymnummer), HÄL
Gävleborgs läns landskontor GVf:1, HÄL
Gävleborgs läns landskontor, landsboksverifikationer, HÄL
Hegardt's excerpts = excerpts preserved at Department of economic history, Uppsala University.
HÄL = Härnösands landsarkiv
Kammarkollegiet, 3:e provinskontoret, 370.2, RA
Länsräkenskaper, Västernorrlands län, landsbok, pag. 565, RA
Länsräkenskaper, Västernorrlands län, verifikationer, RA
Länsräkenskaper, Västernorrlands län, verifikationer, tiondelängder, RA
RA = Riksarkivet
Västernorrlands län, landskontoret, landsboksverifikationer, HÄL
Västernorrlands läns landskontor, Elb:25, HÄL
Västernorrlands läns landskontor, serie

Västmanland county

Lotta Leijonhufvud

Administrative divisions

Västmanland county was formed in 1634 and consisted of 71 parishes and country congregations divided into seven bailiwicks and 13 districts. The following table shows which parishes are included in the database and to which districts and bailiwicks they belonged. One part of Fellingsbro parish, that belonged to Örebro county, was moved in 1694 over to Åkerbo district in Västmanland county.²⁴¹ Some parishes were in certain administrative contexts divided over several districts and/or bailiwicks. In tithes extracts, the names of the parishes have however only occurred exclusively in one bailiwick (see e.g. Huddunge that is only accounted for under Salberg bailiwick.)

Västmanland's administrative divisions

Bailiwick	District	Parishes
Västerås northern county	Norrbo district	Fläckbo, Skultuna, Haraker, Romfartuna, Skerike, Sankt Ilian and Västerås town
Västerås northern county	Siende district	Hubbo, Tillberga
Västerås southern county	Siende district	Badelunda, Irsta, Kärrobo, Kungsåra
Västerås southern county	Tuhundra district	Lillhärad, Dingtuna, Lundby and Barkarö
Strömsholm county	Snävringe district	Munktorp, Kolbäck, Svedvi (Hallstahammar), Säby, Berg, Rytterne, Ramnäs and Sura
Ulvesund county	Åkerbo district	Odensvi, Medåker, Säterbo, Arboga, Köping, Kungs-Barkarö, Himmeta, Björskog, Torpa, Malma, Skedvi, Bro and the towns of Arboga and Köping
Skinnskatteberg and Gamla Norbergslagen	Skinnskattebergs mining district	Skinnskatteberg, Gunnilbo, Hed
Skinnskatteberg and Gamla Norbergslagen	Gamla Norbergslagen	Norberg (1732 Västansfors that before was part of Norberg parish), Västervåla
Skinnskatteberg and Gamla Norbergslagen	Vagn district	Västerfärnebo (1732 Färneboberg = Karbenning, that before was part of Västerfärnebo).
Salberg county	Övertjurbo district	Kila, Kumla, Möklinta, Sala parish
Salberg county	Våla district	Harbo, Huddunge, Nora, Våla
Salberg county	Simtuna district	Enåker, Lövsta, Nora, Norrby, Tärna
Salberg county	Torstuna district	Huddunge (part), Lövsta (part)
Väsby county	Torstuna district	Österunda, Härnevi, Torstuna, Vittinge,
Väsby county	Yttertjurbo district	Björkstå, Tortuna, Sevalle och Ängsö
Väsby county	Simtuna district	Altuna, Frösthult, Simtuna

²⁴¹ Lagerstedt 1973. No signs of "Fellingsbro socken" have been found in Västmanland's documentation.

In 1667, parish sums were missing for tithes at the same time as bailiwick division is somewhat different for Salberg and Väsby counties that are divided into the following bailiwicks: 1) Övertjurbo district with the parishes Norrby, Tärna, Möklinta, Sala, Kumla and Kila; 2) Våla district with the parishes Våla (Östervåla), Nora, Harbo and (part of) Huddunge parishes and, 3) Simtuna and Torstuna districts with the parishes (part of) Huddunge, Lövsta, Enåker and Nora. Tithes information for these bailiwicks exists and is accounted for in the database, which means that all tithes for Västmanland county are accounted for, even if parish and/or sums kept together at bailiwick level are missing for 1667.

Strömsholm county belonged during this period 1665-1718 to *Hedvig Eleonora's Life estate*. In contrast to what is valid for her possessions in Södermanland county, there are in many cases copies of tithes extracts in Västmanland's county accounts office in the Uppsala regional National archives. This has been advantageous for the investigation since the Life estate's documentation is to a great extent damaged or missing. Munktorp parish, part of the Life estate, also had extensive duties towards Uppsala Academy, and there Astrid Hegardt's excerpts have been a great help for this project.²⁴²

Ängsö parish was in its totality a manor estate and its freehold properties were first taxed in 1692.²⁴³ On account of lack of regular tithes information, the parish has been excluded from the database's district division (Ytterturbo district is accounted for thus exclusive Ängsö). *Rytterne parish* was divided into Stora and Lilla Rytterne parishes in 1719. Tithes from both are however accounted for as one (under Stora Rytterne). In 1733, *Västanfors and Färneboberg (Karbenning)* were broken out of their old parishes: *Norberg* and *Västerfärnebo* respectively. For comparison over time, these two new parishes should therefore be added to their old parishes up until they are given fixed tithes: in 1743 for Västerfärnebo and 1755 for Norberg respectively. Such cases are found in an extra parish column that has been added to the database, Socken B column. Socken A gives on the other hand the source material's division.

The present-day parishes Hallstahammar and Karbenning were named Svedvi and Färneboberg respectively during the period under investigation, and the latter was previously called Färnebo fjärding.²⁴⁴

Source materials

For the 1600s, these are damaged to a great extent in the National Archives. This is the case for both Västmanland county's accounts and the Life estate's accounts (concerning the latter, see in more detail the chapter on Östergötland county). The National Archives have however also lent a number of documents that have been black-marked if they have been in such a state that they can at all be used. For the Life estate's possessions in Västmanland there is as previously mentioned also information in the Uppsala regional National archives.

The county accounts for Västmanland county also exist as copies in the county government's accounts office's archives in the National archives in Uppsala, where they are in good condition throughout. The county accounts office's summaries of incomes and costs exist from 1665, but sometimes they lack tithes extracts on the parish level. The ledgers and verifications with tithes lists start in 1684 in the regional National archives.

Tithes in the parishes of Torpa, Munktorp, Björskog and Harbo were allotted to Uppsala university and the accounts over these tithes have been preserved in the Uppsala university archives for the time up to 1719 (series Avkortningsböcker and Räkenskaper). This information was collected

²⁴² Hegerdt A. Ekonomiskhistoriska institutionen, Uppsala universitet

²⁴³ Lagerstedt 1973, p. 106.

²⁴⁴ My database parish division in Simtuna and Övertjurbo districts deviates from that in Palm's and Martin Linde's agricultural project (see literature list under Palm and Martin Linde); Norrby and Tärna have here been carried over to Simtuna.

by Astrid Hegardt for her thesis “Akademiens spannmål” and the Department of economic history at Uppsala university has kindly shared her excerpts. There is very little difference between the tithes information in the university archives and that in the crown’s county accounts for Västmanland and (for Munktorp parish) in Hedvig Eleonora’s Life estate archives. For Munktorp, the difference in average value between the tithes stated in the County accounts compared with the Academy for the period 1665-1719 is only some barrel; about 0.5 %. For Torpa, the difference in average value between the tithes in the County accounts compared with the average value of those for the Academy for the period 1665-1719 is only about ½ barrel; about 0.8 %. For Björskog the difference is somewhat bigger: 3 barrels, which is equivalent to about 3%. For Harbo parish the difference is very small; only 0.2 barrels or 0.2 %.

In the database, tithes information is accounted for throughout from the National Archives or the Uppsala regional National archives, except for those years when no information at all exists. Hegardt’s information has been used for Munktorp for the years 1684, 1691, 1702, 1710, for Björskog and Torpa parishes only for the year 1678, for Harbo parish for 1667 and 1714.²⁴⁵

The Stockholm Orphanage archives also have information about the so-called Orphanage barrel from Västmanland county. And there exists there a bailiwick sum for Salberg county in 1714 that has been possible to use for the database in the absence of closer information. Moreover, the information mentioned for Harbo parish that year also exists in Hegardt’s academy excerpts. It is important to be observant of this when summing up the Salberg county tithes for 1714, so that Harbo parish’s tithes are not counted twice (both in total sum from the Orphanage and the volume accounted for from the parish).

Gaps remaining in the Västmanland tithes series

Parish/Bailiwick	Year missing	Remarks
Västerås county	1691	Summary of incomes and costs + Verif incomplete
Nora parish	1668	Summing up missing.
Gunnilbo, Hed parishes	1678	Missing
Strömsholm county	1691, 1702, 1710	Missing in Life estate and Uppsala regional National archives. Apart from Munktorp parish.
Svedvi, Berg, Rytterne, Ramnäs, Sura parishes	1717	Mould damage in Life estate.
Väsby county	1721	Black-stained in National Archives. Damaged volume in Uppsala regional National archives.
Berg, Västervåla parishes	1778	Volume missing. Berg perhaps had fixed tithes.

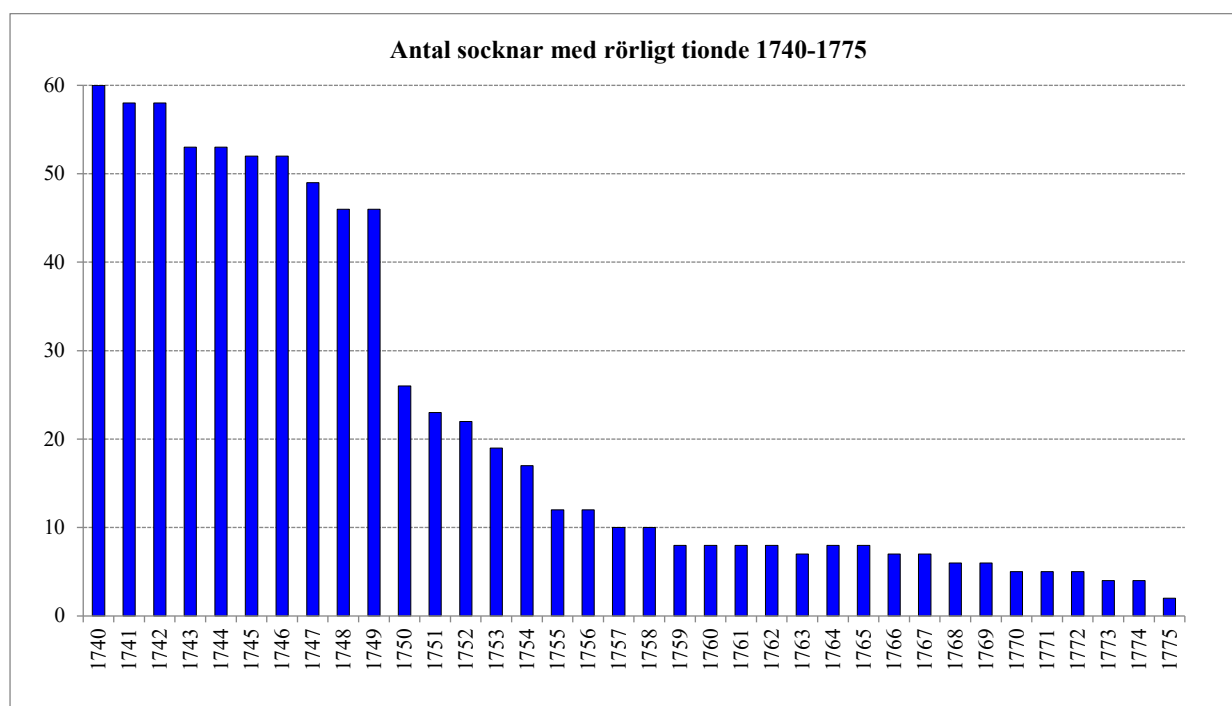
Since towns only in exceptional cases paid tithes, these are accounted for in the project but not as a rule in the aggregations made over tithes at various levels. From Västmanland I have not encountered any tithes lists, but on the other hand “number of stook lists” – with (sometimes) calculated tithes. For Västerås town they start in 1687, for Sala, Arboga and Köping they exist from and including 1688.

²⁴⁵ For 1678 there is information for the whole of Ulvesund county, in which Björskog and Torpa are included. In the series Blue numbers in the National Archives, there is a compilation of tithes information for a number of parishes in Västmanland and the years 1672-1681 (volumes 126-127).

Fixed tithes settings

Fixed tithes were introduced in Västmanland according to the table below. A schematic image is also given in the diagram below for the briefer period 1740-1775, when most of the parishes in Västmanland introduced fixed tithes. In 1749, 46 (of a total of 67 parishes) had adjustable tithes. In 1750, 20 parishes are removed and only 26 continue to have adjustable tithes. Six parishes show adjustable tithes right up until and including 1769: Munktorp, Berg, Björskog, Torpa, Färneboberg and Västervåla. Munktorp, Björskog and Torpa are large grain parishes and deliver between 250 and 500 barrels of grain each. Färneboberg and Västervåla are on the other hand very small and deliver only about 20-30 barrels of grain. Berg is a fairly big parish with about 100 barrels of grain.

Number of parishes with adjustable tithes in 1740-1775



In Västmanland, fixed tithes were partially introduced in certain parishes. In among others Hubbo and Lillhärad parishes, certain of the parish's tithes givers according to agreement or öresland (an older measurement of land) for years before the whole parish follows after. In Tillberga parish, certain peasant farmers start having tithes contracts in 1738. The number of contract givers varies during the period 1738-1746 from two to six. I have assessed this as so few that the tithes can despite them be assumed to reflect harvest variations as a whole during this period until tithes become fixed in the whole parish in 1747. In Hubbo, 13 givers have however tithes contracts and 32 continued to have adjustable tithes in 1738. The contract peasants are so many that I have chosen not to include the parish's tithes in the database from and including 1738.

Introduction of fixed tithes in Västmanland's parishes

Parish	Year	Parish	Year	Parish	Year
Fläckebo	1750	Sura	1750	Tärna	1750
Skultuna	1754	Odensvi	1751	Kumla	1750
Hubbo	1738	Medåker	1754	Kila	1751
Haraker	1757	Sätterbo	1755	Möklinta	1750
Tillberga	1747	Arboga own	1764	Enåker	1750
Romfartuna	1743	Arboga parish	1747	Lövsta	1750
Skerike	1759	Köping town	1775	Huddunge	1750
Sankt Ilian	1748	Kungs-Barkarö	1747	Våla	1750
Västerås town	Harvest- dependent	Himmeta	1753	Harbo	1763
Kungsåra	1752	Köping parish	1748	Sala parish	1750
Kärrbo	1753	Björskog	1775	Nora	1766
Irsta ^a	1742	Torpa	1775	Sala town	1799
Badelunda ^a	1742	Malma	1750	Torstuna	1750
Lillhärad	1725	Skedvi	1745	Hernevi	1750
Dingtuna	1739	Bro	1750	Österunda	1750
Barkarö	1739	Skinnsberg	1755	Vittinge	1750
Lundby	1732	Gunnilbo	1755	Simtuna	1750
Munktorp	1770	Hed	1757	Altuna	1750
Kolbäck	1720	Norberg	1755	Frösthult	1750
Svedvi	1722	Västanfors	1755	Björksta	1753
Berg	1778	Västervåla	rörligt	Tortuna	1743
Säby	1741	Färneboberg	1773	Sevalla	1748
Rytterne	1741	Västerfärnebo	1743	Ängsö	1751
Ramnäs	1741	Norrby	1750		

Remarks: a) Irsta and Badelunda: in 1738 a couple of givers in each parish start to pay fixed tithes. In 1744, all parishes' tithes are fixed, but in 1742, tithes in both parishes appear so stable that they are not suitable for using as proxy for grain production.

Just to complicate the picture of fixed tithes further, the following parishes have fixed tithes only for a few years, after which they return to adjustable tithes, or mainly adjustable tithes, for a number of years, before they finally introduce fixed tithes according to the earlier table.

Parishes with fixed tithes for shorter periods

Parish	Fixed tithes, period
Skultuna	1717-1719
Hubbo	1718-1719
Romfartuna	1718-1720
Lundby	1718-1720
Skerike	1718-1720
Dingtuna	1718-1719
Sankt Ilian	1718-1720
Haraker	1719
Berg	1719-1738, 1740, 1778 (?), 1779-
Svedvi (Hallstahammar)	1722-1727, 1738-
Färneboberg	1737
Kungsåra	1748

For Berg parish, the tithes list for 1778 is missing, which is why it has been impossible to establish whether the parish introduced fixed tithes in 1778 or 1779.

The barrel as measuring unit, measuring method, excess measures

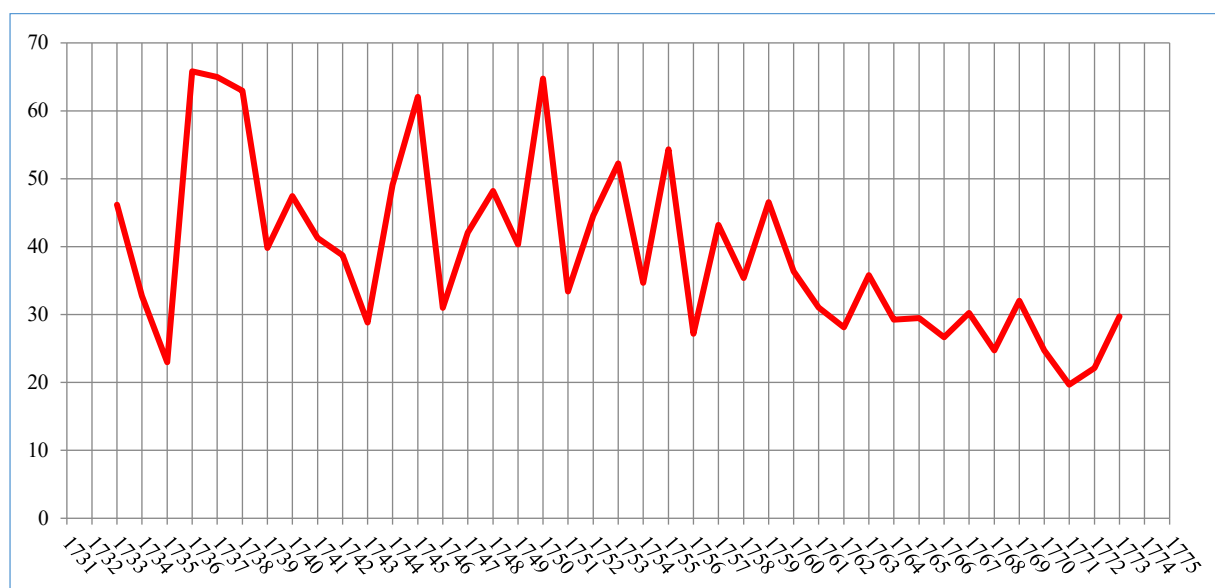
In the Västmanland materials I have not seen anything on the 1730s regulations on excess measures (see report's introductory chapter), or the effects of these, before 1739, but then the documents refer specifically to the new regulations.

In the database, levelled-off volumes are shown throughout, for most counties easily readable in the source materials. Here however there was a peculiarity for Västmanland. In the tithes extracts, there is sometimes a recalculation of the tithes lists' levelled-off barrels to bigger barrels that include the excess measures. This means that the number of barrels with excess measures is fewer than the number of levelled-off barrels.

For the whole of Västmanland, the extracts show large barrels including excess measures in 1739, except for the parishes Säby, Rytterne, Ramnäs and Sura in Strömsholm county, as well as for the parish Kungs-Barkarö in Ulvesund county.

The example of Färneboberg (Karbenning) shows how this may appear: this parish has a short and complicated history. It broke away from Västerfärnebo in 1733. The material shows adjustable tithes until and including 1736. In 1737 it is noted "... after agreed Contract with the Director the 24 July 1737 for 65 barrels Grain from the whole congregation ...". The 1738 documents are missing in the National Archives, so the information comes from the Uppsala regional National archives. However, there the stook count is shown as usual (and fixed number of stooks with 13 levelled-off kappes per stook), i.e. adjustable tithes. In 1739, the new regulations on excess measures take over and Färneboberg accounts throughout for the lower volumes of excess measures in the extracts, which is why the database contains the levelled-off information from the tithes lists. The following diagram shows tithes development in levelled-off barrels in Färneboberg for the period 1733-1773, where the final year has a fixed tithes sum of 29.725 barrels.

Tithes development in Färneboberg 1730-1775 (barrels of reduced grain)



Remark: please note that the final year, 1773, shows the fixed tithes sum of 29.725 barrels.

From 1740 the parishes in Västmanland show a splintered picture in which the extract sometimes agrees with the tithes lists' sums and sometimes does not. The following table summarises where the database's tithes information is collected from. "R" in the table means that the tithes in the extracts are with excess measure which is why the tithes volumes have been taken from the tithes lists and refer to levelled-off measures. "S" stands for levelled-off measures and in these cases the extracts agree with the tithes lists. For the parishes (the overwhelming majority) that are not to be found in the table the tithes lists' straight – levelled-off – measures have agreed with the extracts' sums. For Romfartuna, the information for 1740 in the database is multiplied by 36/32, which results in the same figures as in the tithes lists' levelled-off volumes.

Measuring vessels' volume, measuring barrel

In Västmanland county during the entire period the measures barrels, Swedish firkins and kappes were used. Tithes are shown mainly in the measures barrels and Swedish firkins.

Västmanland parishes and years shown with excess measure (R) in the extracts, but levelled-off measure (S) in the tithes lists

Socken	1740	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	1751	1752	1753	1754	1755
Romfartuna	R	R	R	fix	fix	fix	fix	fix	fix	fix	fix	fix	fix	fix	fix	fix
Skerike	R	R	R	S	S	S	S	S	S	S	S	S	S	S	S	S
Odensvi	R	R	R	R	R	R	R	R	R	R	R	fix	fix	fix	fix	fix
Medåker	S	R	R	R	R	R	R	R	R	R	R	R	R	S	fix	
Sätterbo	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	fix
Kungs-Barkarö	S	R	R	R	R	R	S	fix								
Malma	S	R	R	R	R	R	S	S	S	R	fix					
Skedvi	R	S	R	R	R	fix	fix	fix	fix	fix	fix					
Bro	S	R	R	R	R	S	S	R	R	R	fix					
Skinnskatteberg	S	R	R	R	R	S	R	S	S	S	S	S	S	S	S	S
Gunnilbo	S	R	R	R	S	S	R	S	S	S	S	R	S	S	S	S
Hed	S	S	R	R	S	S	S	S	S	S	R	R	S	S	S	S
Norberg	S	R	R	S	S	S	S	S	S	S	R	S	S	S	S	S
Västanfors	S	R	R	S	S	S	S	S	S	S	R	S	S	S	S	S
Västeråla	R	R	R	S	S	S	S	S	S	S	R	S	S	S	S	S
Färneboberg	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R
Västerfärnebo	R	R	R	fix												
Sala sn	R	R	R	S	R	R	R	R	S	S	S	S	S	S	S	S

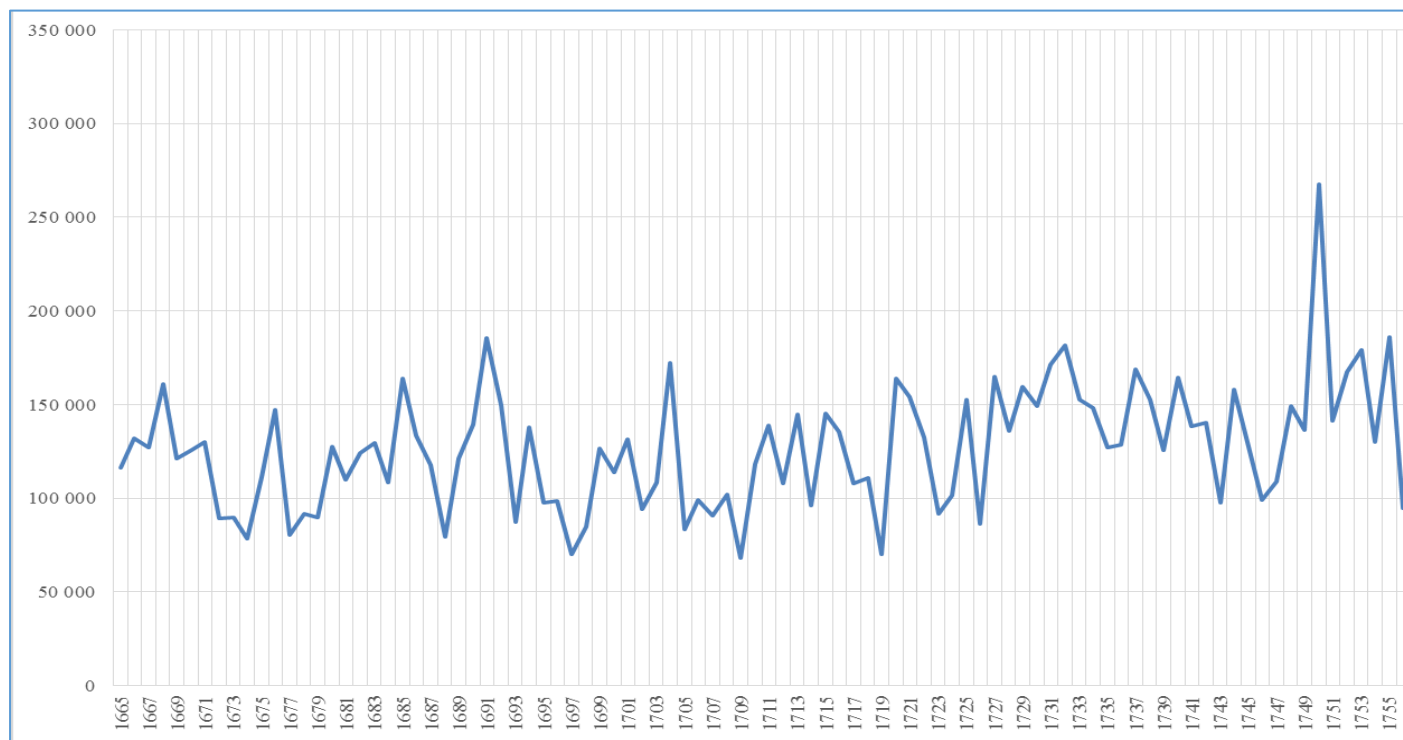
Remark: R= excess measure in extract. S= levelled-off measure in extract. In the tithes lists, levelled-off measure is always given both in calculations based on numbers of stooks for each peasant farmer and in the summation of the tithes lists.

Harvest estimates

Harvest estimates have been made in the usual way in the project – based on the crown’s proportion, the entire tithes have been possible to calculate, multiplied by 10, further multiplied by 1.1 to compensate for reductions downwards at tithes taxation and finally marked up for tithes-exempt farms based on mantals of land. The same factors for the marking-up have been used as Palm suggested for the time around 1690 in a previous work.²⁴⁶ The estimate is based on estimated harvests around 1665 that have been successively marked up according to yearly average indices for tithes from the county’s bailiwicks (the database’s index 1665=100). Up until and including 1749, the estimates build on information from all the bailiwicks, and thereafter, the estimates are more uncertain. There is the possibility to extend the estimates further a decade or two forwards in time based on the parishes that then still held onto adjustable tithes, but this demands a more thorough analysis than has been possible within the present project. The estimates in the following diagram until and including 1765, are when we still have tithes information from five of the county’s bailiwicks.

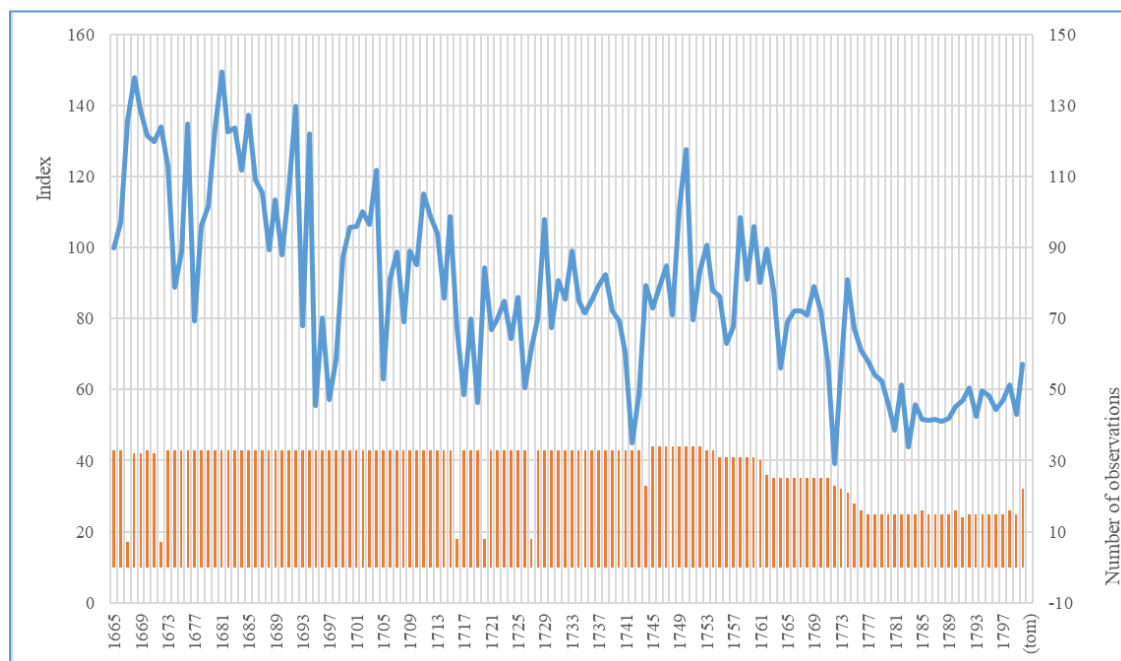
²⁴⁶ Palm 2012.

Estimated harvests in Västmanland county in 1665-1765 (barrels of reduced grain)



The following diagram shows in index form the tithes' development in the whole of Västmanland county in the period 1665-1765.

Tithes in Västmanland county in 1665-1765 (reduced grain; index 1665=100)



The conclusion for grain development in Västmanland county is therefore that grain production suffered great difficulties during the latter part of the 1600s and the first decades of the 1700s. From the 1720s onwards, grain production increased and the 1730s and 40s saw a circa 20 % higher figure for grain production compared with the 1660s. We are doubtful about whether the very much greater volumes in the 1750s and onwards can be said to be representative for the development in the whole of Västmanland, since the number of parishes that then remain are so few.

Harvests in Västmanland 1665-1765 (reduced grain; index 1665=100)

XXXXXXXXX LÄGG IN INDEXTABELLEN HÄR TYVÄRR. JAG VET INTE VAR DESSA FILER FINNS.

Variables in the database "Västmanland"

The file "Grunddata"

- Year
- County
- Bailiwick
- District
- Parish A = parish divisions according to source material
- Parish B = ditto, with parishes divided step by step set under the original parish's name
- Wheat tithes in decibarrels
- Rye tithes in decibarrels

Barley tithes in decibarrels
Grain tithes (rye + barley) in decibarrels
Mixed grain tithes in decibarrels
Oats tithes in decibarrels
Pea tithes in decibarrels
Total tithes in unreduced decibarrels
Total tithes in decibarrels reduced straw grain
Estimated Crown tithes in decibarrels reduced ren straw grain
Estimated harvest in decibarrels reduced ren straw grain
Index (1665=100)
Sources
Remarks
Factor for marking up according to Palm (1690) = marking-up factor for exempt farm
according to Palm 2012

Key to sources

Hegardt, Excerpter, Uppsala universitet, Ekonomisk historiska institutionen
RA = Riksarkivet
RA, Länsräkenskaperna, Hedvig Eleonoras Livgeding 1661-1718
RA, Länsräkenskaperna, Västmanlands län
RA, Länsräkenskaperna, Västmanlands län verifikationer
SSA, Barnhuset = Stockholms barnhus, Huvudböcker, Stockholms stadsarkiv
ULA = Landsarkivet i Uppsala
ULA, Länsstyrelsen i Västmanlands län, Landskontoret

Öland

Lennart Andersson Palm

Administrative divisions

This province had been included in Kalmar county since 1634 but in 1654-1680 in queen Kristina's "livgeding", a so-called Life estate that the queen received after her abdication. The island was fiscally divided into two bailiwicks, the Northern and Southern (Sw. Ölands Norra, Ölands södra mot). Runsten parish was divided between these two and the parts are called in the project database Runsten N and Runsten S respectively. Köpinge parish appears sometimes in the source materials as two parts. These parts' tithes have been added together. Between 1819 and 1826, the island was an independent county but apart from that belonged to Kalmar county since 1680.

Source materials

Parish-wise tithes information and extracts have been preserved for the period of the Life estate in the central National Archives.²⁴⁷

From a note in the archives mentioned, it emerges that Öland's "intrader", incomes, in 1683 were taken over from the queen's Life estate by the crown against remuneration in, then Swedish, Bremen (in today's Germany). For the time after 1683, no tithes information has been found in this archive.

Information has also been sought in the county accounts for Kalmar county in the National Archives. The accounts are very damaged and missing completely for several periods. Only a few years have been possible to excerpt.

The duplicate copy of the county accounts has been relatively well preserved in the Kalmar county government's county accounts office in the Vadstena regional National Archives. For our period of investigation, only the ledgers and verifications are missing for the years 1683 and 1684. However, it emerged that tithes information for one or the other bailiwick might be missing for certain years. Explanations may be that verifications had not been handed in, that they had been bound wrongly or that I did not find them in the volumes that for certain years are several thousand pages long.

In this investigation it emerged that the county accounts' tithes extract for Öland from our period had been put in with the verifications, not as in many other places in the country in the county ledgers.

Tithes information for some years has also been found in the island's two district scribes' archives also kept in the Vadstena regional National Archives.

The Vadstena Soldiers' home accounts in the War archives, now a part of the central National archives, have also provided bailiwick sums for the 40th part of the tithes from Öland that were handed in to the Soldiers' home.²⁴⁹ Of the tithes extract for 1670 in the Governor general's archive over queen Kristina's Life estate it emerges that the Soldiers' home charge for at least 1669 was estimated based on the whole of the unreduced tithes sum, i.e. completely in accordance with the regulations.²⁵⁰ There is no reason to believe that the method of calculation was any different during earlier and later years. Some years I have found information about the Soldiers' home charge in

²⁴⁷ In Kungliga arkiv, Generalguvernmentets för drottning Kristinas underhållsländer, räkenskaper och handlingar, archive list 71 1-2. A bailiwick sum for 1676 has been found in Generalguvernmentets för drottning Kristinas underhållsländer, räkenskaper och handlingar, archive list 541.

²⁴⁹ Krigskollegium, Krigsmanshuskontoret, KrA. Three series exist from and including 1683 and onwards: 1) Koncepthuvudböcker (G I a), 2) Renskrivna huvudböcker (G I b) and for the whole period 3) Verifikationer till huvudböcker (G I c).

²⁵⁰ Kungl. arkiv, Generalguvernörens över drottning Kristians underhållsländer, K569, s. 115, RA.

currency. I have interpreted this as the Soldiers' home being paid in money per barrel according to the price that was decided for bad harvest and expensive times on the Crown's peasant farms from and including 1684, i.e. 9 daler kopparmynt = 3 daler silvermynt.²⁵¹

Measuring vessels' volume, measuring barrel

During the whole period of investigation, estimates refer to barrels with 6 skäppas to the barrel, certain parts of periods also with skäppe firkins, of which there were 4 to the skäppa.

The barrel as measuring unit, measuring method, excess measures

I have interpreted the material as that the extracts, as is often stated in the headings, are summings-up from tithes lists and that they refer to the number of levelled-off barrels of tithes estimated in the fields. When the tithes were handed in to the tithe barns, the tithes givers have also had to hand in the statutory excess measure. This is not accounted for explicitly in the extracts, but I have drawn the conclusion that levelled-off barrels and barrels with excess measures are interchangeable numerically.

Tithes systems

In connection with fixed tithes setting it was stated in 1717 that "hereto in the whole of Öland Tithes have been paid according to the yearly growth and tithes counting in the fields".²⁵² The Crown tithes in Öland amounted to 2/3 of the total tithes.

The earliest tithes information does not say anything about test threshing etc. However, in a tithes list from 1675 it emerges that test threshing had at least taken place then at which grain was estimated in "loads" (Sw. lass) and excess measures in stooks (Sw. trave). The county accounts office's list for 1705 shows once again test threshing, with as a rule one threshing result per village. In the 1700s lists it is regularly noted that counting and test threshing have taken place correctly. Of the few preserved older lists, those for 1679 and 1680 mention nothing about test threshing, which naturally does not exclude that this has occurred. For 1706, there are however unsummed-up tithes lists for both bailiwicks that give a template-like impression, with the same tithes amount often listed for all the individual farms in a village. One must thus assume that tithes information can be of varying quality between the years.

Fixed tithes settings

Öland was given fixed tithes in 1718, so the last year with harvest-dependent tithes was thus 1717.²⁵³

Database

For Öland, the project database's basic data consists of parish data where this has been available. Where this has not been the case, a "bailiwick sum", most often based on the Soldiers' home barrel, has been used.

For 1677 and 1678, certain parishes are missing in the extracts, – they are Vickleby, Resmo, Glömminge, Gårdby and the Southern bailiwick's part of Runsten parish. Perhaps this has to do with the Danish plundering of the island in August 1677 (see below).

²⁵¹ *Kungl. Maj:ts nådigaste förordning och reglemente för dess betjante under militien och landsstaten 4/1 1684 samt Kungl. Maj:ts nådige förklaring över någre punkter uti den 5 januari 1684 utgångne reglemente 7/4 1685, § III.* In 1671, Öland according to the Soldiers' home ledgers had not handed in its accounts in time, for which they were fined 20 barrels and debited tithes on a discretionary basis. From these debited tithes for the whole of Öland, I have subtracted the known real Soldiers' home barrel for the Southern bailiwick, and thereby estimated the tithes of the Northern bailiwick.

²⁵² Kalmar länsstyrelses arkiv, landskontoret, Handlingar angående tionde 1701-1749, VALA.

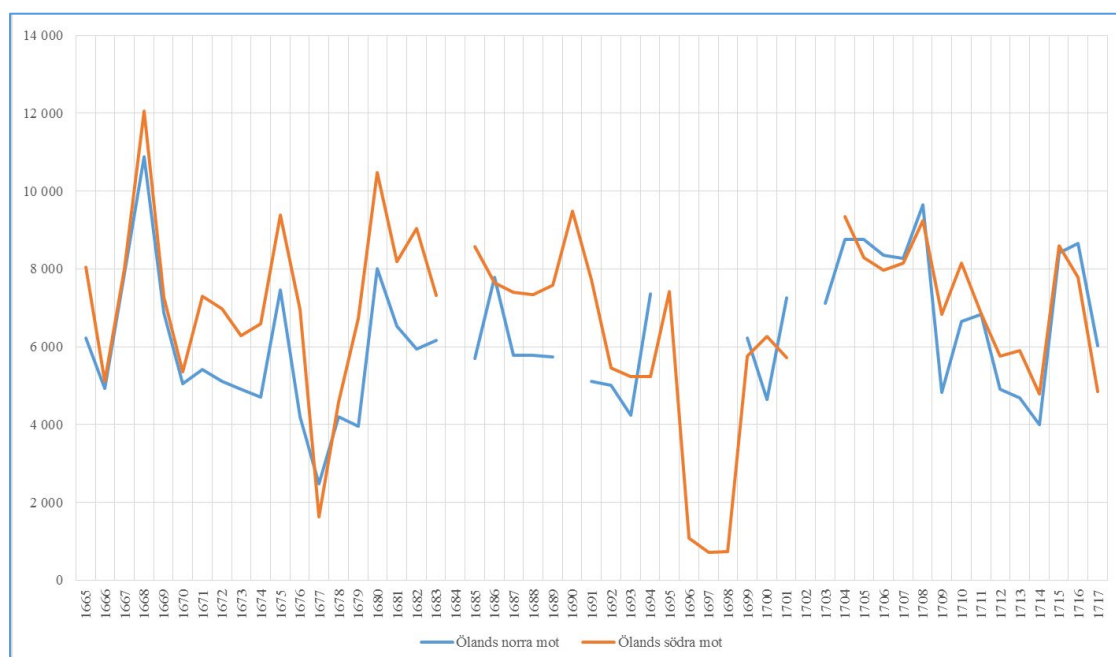
²⁵³ Kalmar läns landskontor, landsboksverifikationer 1718, 1719, VALA.

Harvest estimates

In the database, the harvest estimates for Öland have primarily been made according to parish-wise information, but where this has been missing, from bailiwick information. It has been done in the usual way by multiplying the Crown tithes, here by 15, a multiplication by 1.1 to compensate for roundings-off downwards when tithes were measured, and finally a supplement for tithes-exempt farms. The existence of these latter has for the sake of simplicity been assumed to be unchanged in 1665-1717. In the tithes lists for Öland in 1717, no farms are named that through privileges were exempt in the southern bailiwick. Ottenby royal manor in Ås parish must be assumed to have been in use during this period. The farm was later taxed at 7.75 mantals. From tithes information in 1717 for the Northern bailiwick, it emerges that Borgholm castle barn, Horn royal farm in Högby, both without assessed to mantals, and Halltorp manor in Högsrum parish, assessed at 1 mantal, did not give tithes. Borgholm royal farm in the Northern bailiwick's Räpplinge parish was in due course set at 5.75 mantals, Horn royal barn at 4 mantals. This meant altogether 7.75 and 10.75 exempt mantals respectively in each respective bailiwick. To this was added the exempt vicarages that have been taken from Martin Linde's assessments for 1750. Harvest estimates have occurred through marking up tithes from the parish average by the just-mentioned factors.²⁵⁴ The harvest estimates' results at the bailiwick level are shown in the following diagram:

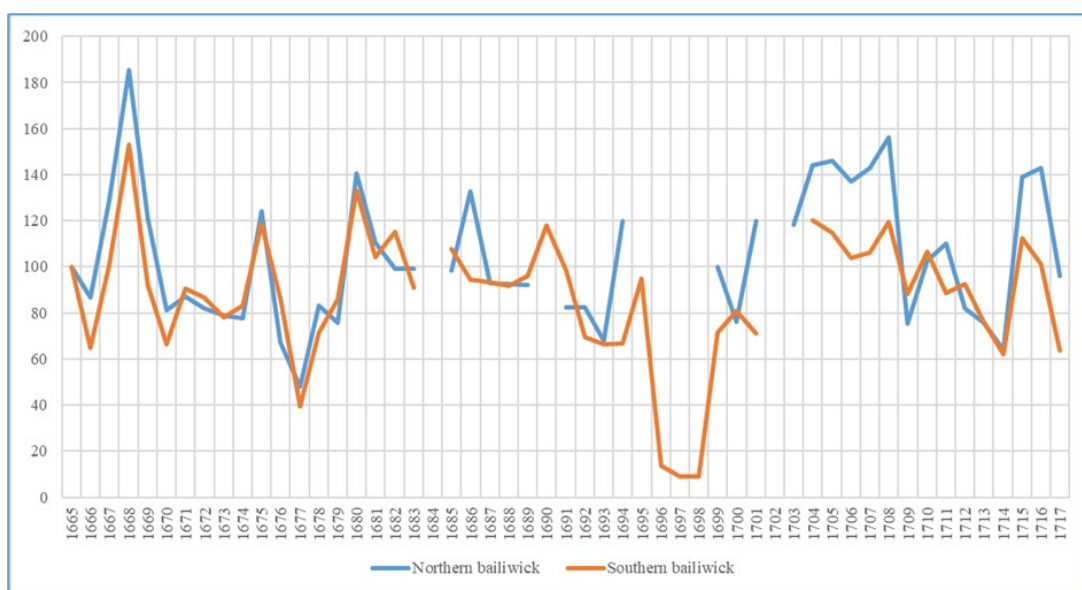
²⁵⁴ Martin Linde 2012, Rosenberg 1881-1883. The mantal for Horn royal farm has been taken from Åhstrand 1765. Part of the royal farm equivalent to about 1 mantal had in the 1500s been transferred to Högby from Persnäs parish.

Estimated harvests for Öland's bailiwicks 1665-1717 (barrels of reduced grain)



In the following diagram, harvest estimates are shown in index form:

Harvest index for Öland 1665-1717 (1665=100)



Varia

Öland agriculture was hit by several setbacks during the period of investigation. Some information about these has been found in the source material:

In "Räkning för Öhlands Arendet" (1670-1672), bad harvests are mentioned for 1670.²⁵⁵

For ten days in August 1677, Danish troops pillaged the island. Three-quarters of the farms were affected. As compensation from the crown, many farms were given a number of free years.²⁵⁶

²⁵⁵ Kungl. arkiv, Generalguvernörens över drottning Kristians underhållsländer, K585, RA.

²⁵⁶ Björlin, 1885 s. 203 ff.

The investigation that was soon made by the authorities has left behind a comprehensive agricultural statistical material that I presented in an earlier work.²⁵⁷

In a list among the Kalmar county accounts office's ledgers and verifications in 1698, the 1690s development is described in this way: "... the hard years of bad harvests have now lasted so long, as well as the fact that fishing in the Baltic has been bad, which both parts, here in this place, are the most important foods for the peasantry ...". It has not been possible to collect comprehensive unpaid taxes "so that the farms may be preserved"; for that reason, the farmer is saved from execution when he has according to his best ability done and paid as much as he possibly can, since from those who are still owing, no other possessions exist than only their oxen and cows that they unavoidably must have for their farming ..."

²⁵⁷ Palm 2012, bilaga 3.

Harvest index for Öland's bailiwicks 1665-1717 (1665 = 100)

Year	Northern bailiwick	Southern bailiwick
1665	100	100
1666	87	65
1667	129	101
1668	185	153
1669	121	92
1670	81	67
1671	87	91
1672	82	87
1673	79	78
1674	78	83
1675	124	119
1676	67	86
1677	48	39
1678	83	71
1679	76	86
1680	141	133
1681	110	104
1682	99	115
1683	99	91
1684		
1685	99	108
1686	133	95
1687	93	93
1688	93	92
1689	92	96
1690		118

1691	82	98
1692	82	69
1693	68	66
1694	120	67
1695		95
1696	16	13
1697		9
1698		9
1699	100	71
1700	76	81
1701	120	71
1702		
1703	118	
1704	144	120
1705	146	115
1706	137	104
1707	143	106
1708	156	119
1709	75	88
1710	103	107
1711	110	88
1712	82	93
1713	76	76
1714	64	62
1715	139	112
1716	143	101
1717	96	64

Variables in the database "Öland"

The page "Grunddata"

År = Year

Län 1913 = County 1913

Fögderi = Bailiwick

Härad = District

Socken = Parish

Vetetionde i decitunnor = Wheat tithes in decibarrels

Rågtionde i decitunnor = Rye tithes in decibarrels

Korntionde i decitunnor = Barley tithes in decibarrels

Spannmålstionde i decitunnor = Grain tithes in decibarrels

Beräknat totalt tionde i decitunnor ren säd = Estimated total tithes in decibarrels reduced grain

Skördeberäkning = Harvest estimate

Skördeindex (1665=100) = Harvest index (1665=100)

Källa = Sources

Key to sources

- Generalguvernementets för drottning Kristinas underhållsländer räkenskaper och handlingar, Volym VIII, RA
- Hskr Norra motet, VALA = Häradsskrivarens i Ölands norra mot arkiv, VALA
- Kalmar landskontor, EIIa, verifikationer, VALA = Kalmar länsstyrelses landskontor, volym EIIa, verifikationer, VALA
- Kgl arkiv, Genguv Kristinas underhållsländer, RA = Kungliga arkiv, Generalguvernörens över drottning Kristinas underhållsländer, RA
- Kgl arkiv, Genguv Kristinas underhållsländer, "Kapitalbok", RA = Kungliga arkiv, Generalguvernörens över drottning Kristinas underhållsländer, "Kapitalbok", RA
- Krigsmanshuset i KrA, anger bara 40-delen, multiplicerats här = Krigskollegium, Krigsmanshuskontoret, huvudböcker or verifikationer in KrA, only gives the Soldier's home's 40th of the unreduced tithes, figures here multiplied by 40 to give total Crown's part of total tithes.
- Krigsmanshuset i KrA, anger hela tiondet = Krigskollegium, Krigsmanshuskontoret, huvudböcker or verifikationer i KrA, gives total tithes.
- Krigsmanshuset KrA = Krigskollegium, Krigsmanshuskontoret, huvudböcker or verifikationer, KrA
- Landsbok 1683 enl tiondeinspektorns längd = Länsränskaper, Kalmar län, landsbok, 1683, RA
- Länsräk verif RA = Länsränskaper, Kalmar län, verifikationer, RA
- KrA = National War Archives, now part of RA
- RA = Riksarkivet (central National archives, Stockholm)
- VALA = Vadstena landsarkiv (regional National archives, Vadstena)

Örebro

Erik Hallberg

Administrative divisions

Örebro county, or rather Närke-Värmland county, included the two provinces of Närke and Värmland as well as parts of Dalsland and Västmanland between 1654 and 1779.

Närke consisted of the parishes of Asker, Edsberg, Glanshammar, Grimsten, Hardemo, Kumla, Sköllersta, Sundbo and Örebro. Värmland consisted of the parishes of Fryksdal, Gillberg, Grums, Jösse, Karlskoga mining district (“bergslag”), Karlstad, Kil, Nordmark (belonged originally with the exception of Sillerud parish to the province of Dalsland), Nyed, Näs, Visnum, Våse, Älvdal and Ölme. To this were added some parishes in Västmanland: Fellingsbro, Näsby and Ervalla; Linde and Ramsberg; Ljusnarsberg (Nya Kopparberg); Nora, Hjulsjö and Järnboås as well as Grythyttan and Hällefors. The first three parishes formed a district under the name Fellingsbro. The others formed four separate districts (four “bergslag”, mining districts). In the preserved source materials over tithes, these four mining districts are accounted for under the collective name Örebro Bergslag. In addition to this mining district, Örebro county also included Värmland Bergslag (also called Färnebo district, Värmlandsberg or Filipstad mining district), which included the parishes of Färnebo, Kroppa, Lungsund and Filipstad town; furthermore Karlskoga Bergslag, which consisted of the parishes Karlskoga and Bjurtjärn; and finally Lekebergslagen, which covered parts of the parishes of Kvistbro, Knista, Hidinge (all in Edsberg district) and Kil, Tysslinge, Vintrosa (all in Örebro district). The tithe was reported both for these parishes separately, but also collectively for Lekebergslagen.

In 1665, Örebro county was divided into four bailiwicks (“fögderier”) and a mining district independent from them in terms of tithes, namely Örebro Bergslag. Närke fell into two bailiwicks, Östernärke and Västernärke. (Örebro Bergslag was a separate entity from these bailiwicks and its tithe was reported separately). Unlike Örebro Bergslag, Lekebergslagen was under Västernärke before 1670. Fellingsbro district in the province of Västmanland was in turn part of the bailiwick Östernärke. So much for Närke and the Västmanland parishes belonging to Örebro county.

Värmland was (in 1665) divided into the bailiwicks Östersysslet and Västersysslet, with Värmlands Bergslag included in the former (throughout the period studied). Karlskoga Bergslag (in the province of Värmland), on the other hand, was included in Västernärke before 1670, as was Lekebergslagen. In 1682, the bailiwick Mellansysslet was formed by breaking off the parishes of Näs, Grums and Karlstad from Västersysslet and the parishes of Kil and Älvdal from Östersysslet. From this year there were thus three bailiwicks in Värmland and five bailiwicks (in addition to Örebro Bergslag) totally in the county. In the database, the older bailiwick divisions have been entered.

Gradually, parishes emerged because of breakaways from older parishes.²⁵⁸ As a rule, these “breakaway parishes” paid tithes together with the parishes to which the areas as such had previously belonged. The tithe for the following parishes²⁵⁹ are therefore not separately

²⁵⁸ The parish history in this paragraph builds on Skatteverkets ”Förteckning (Sveriges församlingar genom tiderna)”, <http://www.skatteverket.se/privat/folkbokforing/omfolkbokforing/folkbokforingigaridag/sverigesforsamlingarnomtiderna/forteckning4.18e1b10334ebe8bc80003999.html>, (2015-12-15).

²⁵⁹ Parishes formed later than 1727 are not named in the list above. Of these may perhaps be named Nordmark (formed in 1731 from Färnebo parish) in Värmland mining district and Bo (formed in 1735 from Svennevad parish) in Sköllersta district, that are both included in our database for the county’s tithes.

reported in the source material, but must be assumed to belong to the parishes from which they were once broken off: *Järnboås* (broken off from Nora parish in 1660) in Örebro Bergslag; *Brattfors* (formed in 1661 from *Nyed* parish – probably an exception from the main rule, as the parish's tithe is instead of under *Nyed* reported under *Färnebo* parish) in Värmland Bergslag; *Gåsborn* (formed in 1693 from *Färnebo* parish) in Värmland Bergslag; *Hällefors* (broken out in 1644 from *Grythyttans* parish) in Örebro Bergslag; *Högerud* (formed in 1646 by breaking out from *Stavnäs* parish) in Gillberg district; *Borgvik* (formed in 1716 from *Grums* parish) in Grums district; *Mangskog* (formed in 1705 from *Brunskog* parish) in Jösse district; *Ransäter* (formed in 1670 from *Övre Ullerud* parish) in Kil district; *Sunnemo* (formed in 1653 from *Råda* parish) in Älvdal district; and *Västra Ämtervik* (formed by breaking off in 1674 from *Ämtervik* parish – the remaining part of the parish was then called *Östra Ämtervik*) in Fryksdal district (with the exception of the years 1690–94 when information is available for both *Västra* and *Östra Ämtervik*).

There are some peculiarities. The tithe for two parishes with older origins than the 1600s, *Ödeby* in Glanshammar district and *Ramundeboda* in Grimsten district, are not accounted for separately until 1689 and 1690 respectively. In the case of *Ödeby*, the reason is that the entire parish was previously under a manor and thus did not pay any Crown tithe.²⁶⁰ *Ramundeboda*, on the other hand, does *not* seem to be part of *Viby* parish, which it was broken out of in 1587. According to Hannerberg, this may be due to the fact that the tithe was previously allocated to the parish vicar “at a convenient time”.²⁶¹ The same applies to *Skagershult* (formed before 1647 from *Tångeråsa* parish) in Edsberg district, which tithe was not reported between 1676 and 1689. The tithe for this parish does not seem to have been included in *Tångeråsa* in these years. The tithe for this parish does not decrease during the period by an amount that would correspond to the tithe in *Skagershult*.²⁶² The opposite case is the parish of *Gräsmark* (or *Gräsmarken*) in Fryksdal district. This was only formed in 1751 by breaking away from the *Sunne* parish, but curiously seem to have paid the tithe separately from *Sunne* already in 1691–94. The fact that Crown tithes began to be recorded for certain parishes around 1689 and 1690 probably reflects new instructions for court clerks from the previous years.²⁶³ Further special cases are the parishes of *Kroppa* and *Lungsund* in Värmland Bergslag, which were formed by the breaking out from *Färnebo* parish in 1624 and 1643 respectively. The tithes of these parishes were not reported under *Färnebo* parish, nor separately, but instead together in a separate entry. The same applies to the cases of *Långbro* and *Ånsta* in Örebro district as well as *Ervalla* and *Näsby* in Fellingsbro district, even though all these parishes are old, of medieval origin.

In most cases the tithe of the towns is not reported separately. The tithes of Askersund and Karlstad towns are most probably included in their respective surrounding rural parishes; the tithes of Nora and Lindesberg towns are certainly included in theirs. The only towns to pay freestanding tithes are Kristinehamn and Örebro.

From 1698 the tithes for five parishes in the bailiwick of Östernärke – *Asker*, *Glanshammar* and *Vintrosa* as well as *Almby* and *Norrbyås* – were no longer reported in the regular tithes extracts for Östernärke as the tithe from these parishes were entrusted to the provost of Örebro (before 1635) and to Strängnäs gymnasium (from about 1650). From 1698, an inspector from outside the regular system counted and collected the tithes.²⁶⁴ In practice, this meant that the tithes for the five parishes were (at best) recorded on separate papers

²⁶⁰ Legerstedt 1973, s. 98.

²⁶¹ Hannerberg 1941, s. 196.

²⁶² Hannerberg observed that when the tithe was reported for *Skagershult* in 1647, the tithe for *Tångeråsa* decreased by about the same amount. Hannerberg 1941 p. 196.

²⁶³ Hannerberg 1941, s. 196.

²⁶⁴ Quoted from the tithes extract for Östernärke in 1713.

(usually) in the verifications.²⁶⁵ Such distribution has previously been mentioned for the parishes *Ödeby* and *Ramundeboda* (see above). Moreover, the tithes from the parishes of *Gräve*, *Mosjö*, *Hovsta*, *Ånsta* and *Långbro* were – possible ever since the beginning of the 1600s – were entrusted, in this case to Örebro hospital, but without their disappearing from the tithes extracts. All these parishes (apart from *Ödeby*, *Ramundeboda* and *Skagershult*) had variable tithes even later than 1727 (see below).

Source materials

The Örebro crown accounts have some gaps. It has therefore been necessary to search through the county accounts in the National Archives as well as the county office's source material in the Uppsala regional national archives. The easiest to work with was the preserved county accounts at the National Archives, where tithes extracts (as a rule) were found at the end of the summary of incomes and costs in the county accounts ("länsräkenskaper"). Unfortunately, the gaps in the series were numerous due to damaged books – according to the National Archives' personal mostly caused by mold. County accounts are available for the following years: 1668–1669, 1671–1673, 1675, 1680–1681, 1684–1686, 1691–1693, 1695, 1698, 1701, 1705–1706, 1711–1713, 1715, 1717–1719, 1721–1722, 1724–1727. For other years, I have used the county office's copies of the county accounts, kept at the regional national archives in Uppsala. The exact place in this material where tithe information at parish level was found varied. This material is also subject to gaps. Apparently, tithes extracts for one or several bailiwicks appear only sporadically from the late 1730s onwards. (The work with the county accounts office's material was also complicated by the lack of references from the county accounts to the verifications).

In cases where information on tithes is missing even after reviewing the county accounts, the database's series has been supplemented with information from the Orphanage ("Barnhuset") archives in Stockholm, kept at the Stockholm city archives. The Orphanage was allowed a fortieth part of the Crown tithes from every parish. In the cases investigated, the tithe delivered to the Orphanage was registered at the bailiwick level. To fill gaps, information from this archive has been retrieved for the years 1665–1666, 1670, 1674 and 1676–1677; 1683 (only data from the Värmland part of the county); 1689, 1721 and 1723 (only Östernärke); 1700 (only from Nya Kopparberg); and finally, 1726 (only from Leke- and Karlskoga Bergslag and Örebro Bergslag). (In the database, for the year 1678, information is only available at the bailiwick level for Västersysslet and Östersysslet, but these have been retrieved from the county accounts and not the Orphanage archives. The same applies for 1688 and Örebro Bergslag, Västernärke and Östernärke). For 1665, it has been possible to retrieve information from excerpts by Lotta Leijonhufvud made for an earlier study. For 1666, there is no information in the Orphanage archives for the whole of Närke. However, information for most of the parishes in Närke has been found in the county verifications.

As for the "the Strängnäs parishes", Asker, Glanshammar and Vintrosa, and "the Örebro provost's parishes", Almby and Norrbyås, they are, fortunately, as a rule reported separately in the Orphanage archive materials and not together with the bailiwick of Östernärke. For "the Strängnäs parishes", information from the Orphanage has been used for the years 1700, 1702–1704 and 1725; for "the Örebro provost's parishes" for the years 1702–1704, 1712 and 1725 (before 1728).

Often, the tithes of the county's towns are included together with their respective surrounding rural parish. Unlike several other counties in the project, efforts have been made to include the towns in the various calculations made.

²⁶⁵ Hannerberg has gaps for 1702, 1711 and 1715 and 1702, 1706, 1715 and 1719 respectively for the "Strängnäs parishes" and "the Örebro provost's parishes" respectively, see Hannerberg 1941, p. 197. Just these years have in this project been possible to find information for through the archives of the Orphanage in Stockholm.

Tithes system

The tithe system in Örebro county for the period under study has been discussed by David Hannerberg.²⁶⁶ With the exception of the Östersysslet bailiwick in Värmland, the crown kept two thirds and the clergy one third of the tithe. In Östersysslet the clergy kept half.²⁶⁷ Test threshing seems according to random samples have taken place at the village/hamlet level²⁶⁸, but in some cases at the farm level²⁶⁹.

Measuring vessels' volume, measuring barrel

In Örebro County, tithes were generally calculated in barrels, Swedish firkins and "kappes" (1 barrel = 8 firkins = 32 kappes).

The barrel as measuring unit, measuring method, excess measures

The database's tithe data for Örebro County refer to barrels without the excess measure ("rågan"). When in some material barrels with excess measures are shown, they correspond in number to the barrels without excess measures in the tithe lengths. (For this relationship, see the introduction to this report.)

Fixed tithes

In 1728, a fixed tithe was introduced in many parts of Örebro county. The calculation method behind the fixed tithe (in Närke) has been described by Hannerberg.²⁷⁰

In certain parishes, however, variable, that is harvest-related, tithing continued. These are mainly towns, parishes near towns or mining parishes ("bergslags"-parishes). What these parishes have in common is that they are not particularly interesting from the point of view of the harvest, since the cultivation of grains was given lower priority and/or operated under special conditions – I am thinking here, among other things, of the town's good access to manure – which made these parishes special. The towns are therefore not commented upon further here.

Other parishes are more interesting for this project, to start with the above-mentioned mentioned parishes in Östernärke. "The Strängnäs parishes" *Asker*, *Glanshammar* and *Vintrosa* had variable tithes until 1735; "the Örebro provost's parishes", *Almby* and *Norrbyås*, until 1752. "The Örebro hospitals parishes" also had variable tithes for a longer period of time: *Långbro* and *Ånsta* until (at least) 1752 (with the exception of 1736–1740); *Gräve* until 1751 (with the exception for 1736–1740); *Mosjö* until 1736 (variable again in 1746, but fixed the year after); *Hovsta* until 1735 (just like *Mosjö* variable again from 1746, but fixed from 1749). In addition to these granted parishes in Östernärke, *Gällersta* parish in Sköllersta district had variable tithes until and including 1735. In Västernärke, only *Tångeråsa* had variable tithes after 1727 – in this case until 1737. So much for Närke.

In Värmland and Östersysslet, apart from mining district parishes and towns, the parishes *Nyed*, *Ölme*, *Visnum* and *Rudskoga* had variable tithes after 1727. Due to gaps in the material (see below) it is in some cases difficult to determine when this ceased. Apparently, *Nyed* received a fixed tithe in 1755, while *Ölme*, *Visnum* and *Rudskoga* received it in 1744.²⁷¹

²⁶⁶ Hannerberg 1941.

²⁶⁷ Lars Gustaf Linde 1887, p. 297.

²⁶⁸ Certain parishes in Östernärke and Västernärke in 1666; Glanshammar and Vintrosa in 1701; Almby and Glanshammar in 1713 and 1715.

²⁶⁹ Almby parish 1727.

²⁷⁰ Hannerberg 1941, p. 198–9.

²⁷¹ More closely the 20 August this year, a fixed list was set up.

In Mellansysslet, the four parishes *Frykerud*, *Nedre Ullerud*, *Stora Kil* and *Övre Ullerud* in Kil district, had a variable tithe until 1744. No parish in Västersysslet had a variable tithe after 1727.²⁷²

In some cases, tithes became variable once again in parishes where ~~once~~ fixed tithes had been once introduced. Due to the time frame of the project, this could not be systematically investigated. However, some cases have been discovered and included in the database. This applies to certain Bergslag parishes (and in particular Linde and Nora town parishes), which are not commented on further here. In addition to these, *Almby* and *Norrbyås* (“the Örebro provost’s parishes”) and *Gällersta*, were again given a variable tithe in 1780. Furthermore, *Ånsta* and *Långbro* had a variable tithe for shorter or longer periods during the 1750s, 1760s and 1770s (and still in 1782). A special study of individual parishes’ tithes in the county during the latter part of the 1700s could reconstruct even longer series than has been feasible within the framework of this project.

The series for the parishes with harvest-dependant tithes after 1727 are unfortunately disturbed by gaps. These are due to the lack of tithes lists in the county verifications during the late 1730s and from the 1740s for one or more parishes. The extent to which individual parishes that receive fixed tithes again return to variable tithes at a later stage than after a couple of years has, as mentioned, not been investigated within the framework of the study.

Harvest estimates

Harvest estimates have been made based on a calculation from the whole tithe resulting from the Crown’s share of the tithe. The total tithe has thereafter been multiplied by 10, and thereafter by 1.1 to adjust for rounding down when the tithe was being measured. Finally, a calculation has been done in the usual way for tithes-exempt farms based on the mantals of land (“mantalet”). Palm’s marking-up factors, for Närke based on Hannerberg’s work for the time around 1690, for the rest of the county from an earlier work by Palm, have been used.²⁷³ The results are shown at the province level in the following diagram.

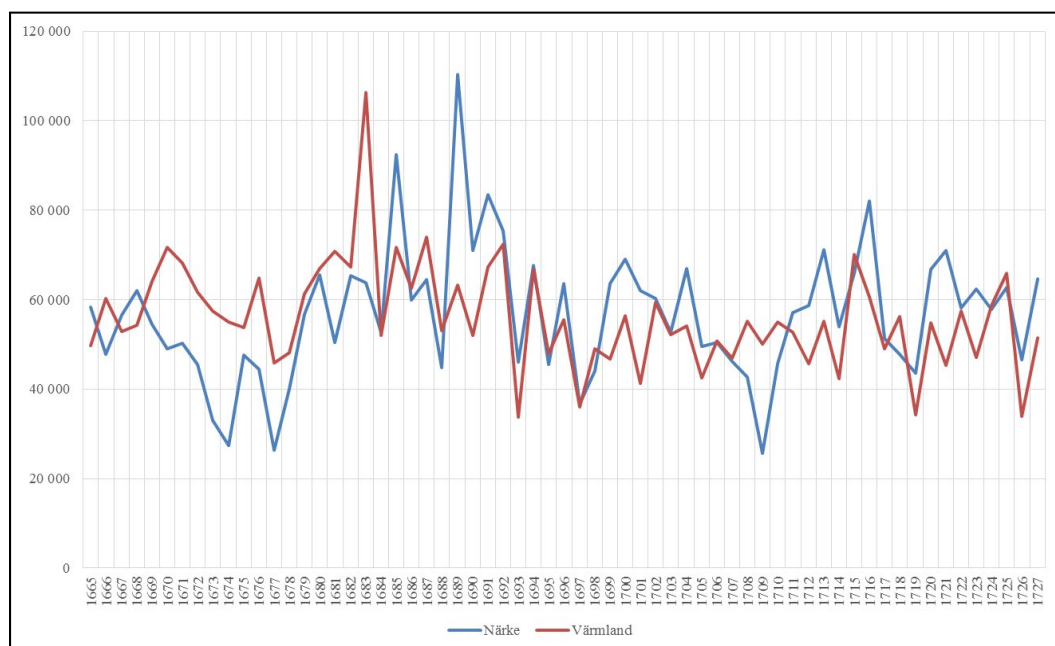
It should be noted that no attempt has been made here to estimate individual missing parish data. This means that in some years the curve may be slightly underestimated.

It is moreover possible to extend the calculations a further decade forward in time based on the parishes that then still retained variable tithes, but this requires a more detailed analysis than is possible within the framework of this project.

²⁷² In a number of cases the information above goes against information in Martin Linde 2012 and Hannerberg 1941 respectively.

²⁷³ Palm 2012; Hannerberg 1941, p. 233 f.

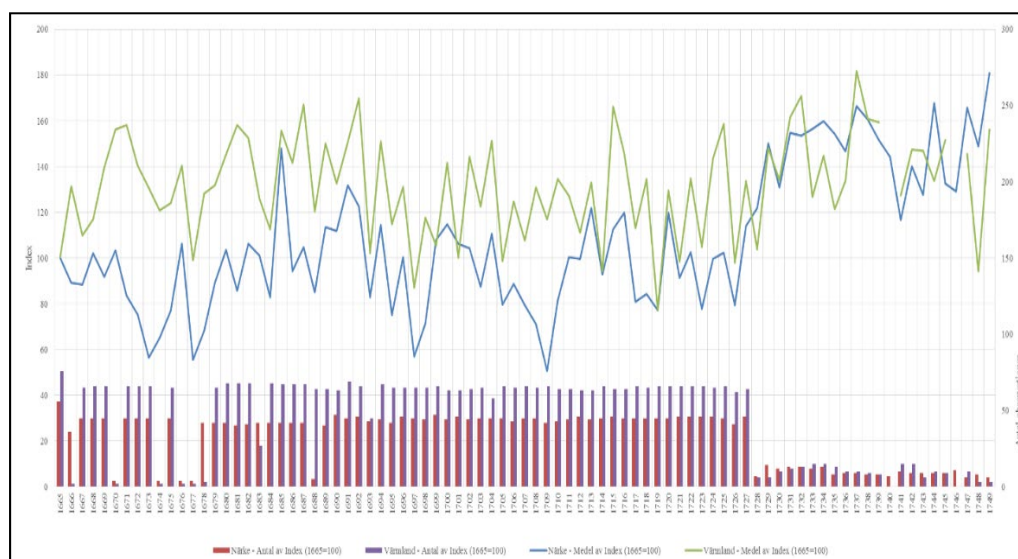
Estimated harvests in Närke and Värmland 1665-1727 (barrels of reduced grain)



Harvest estimates have also been made from indices. Parish-wise information on the counties has been found first for 1667. The years 1665 and 1666 thus lack parish-wise tithes information. To create an index base for the desired starting year 1665, the 1666 and 1665 index per parish has been estimated from the index for Värmland and Närke, respectively, from province-specific figures for the tithe that exist for all three years 1665, 1666 and 1667.²⁷⁴ This is of course a simplification since individual parishes have probably deviated from the province index. However, I consider the relative development of the following years sufficiently realistic to be accepted for lack of better data. In the diagram, we are dealing with the average index for each province. At this level, possibly strongly deviating figures for small parishes play a less of a role than at the bailiwick (“fögderi”) level, not to mention the district (“härad”) levels. A few parishes have not been assigned an index. This applies to Vintrosa, Glanshammar, Asker, Almby and Norrbyås whose tithes were granted at certain times. The index for the Bergslag parishes Hjulsjö, Nya Kopparberg (= Ljusnarsberg) and Grythyttan as well as Ramsberg are uncertain since the clergy there for at least 1679 and an unclear number of years onwards seem to have been allowed to keep the entire tithes.²⁷⁵

As can be seen by the bars in the chart, the number of “variable” parishes decreases after 1727. After this year, however, a smaller number of parishes continued with traditional tithes estimates. In the diagram I have continued the index calculation until 1749.

Harvests in Närke and Värmland 1665-1749 (index 1665=100)



Using the database, index charts can easily be produced at the bailiwick or district levels. One should be aware that any strongly deviating indices for small parishes can have a major impact on, for example, a district index. Here median values would have been a better alternative, but no such values have been calculated in the database.

²⁷⁴ For Värmland, the 1665 tithes in the parishes have been calculated as 0.9109×1667 parish information, and the 1666 tithes as 1.0882; for Närke the equivalent multipliers have been 1.1390 and 0.9394 respectively.

²⁷⁵ In 1694, the tithe list in the margin for Grythyttan notes that “the vicar enjoys all the crown grain that is harvested”. Grythyttan reports 24 barrels unreduced in both 1694 and 1695, but in 1691, 31 barrels 6 Swedish firkins; in 1693, 52 barrels 4 firkins 19/24 kappes; in 1696, 30 barrels; in 1697, 28 barrels 4 firkins 2 kappes; in 1698, 55 barrels 4 firkins 3 kappes and in 1699, 53 barrels 7 firkins 2 2/3 kappes. Variable tithes are accounted for here even though the vicar is allowed to keep everything (possibly, however, the tithe in 1695 is not related to harvest). For Hjulsjö in 1694 is written that “the vicar enjoys as much as is harvested”. In Hjulsjö, too, the tithe is still related to the harvest, while the vicar received the entire tithe.

Estimated harvests in Närke and Värmland (index 1665=100)

Year	Närke		Värmland		Värmland and Närke	
	Average of indices	Number of parishes	Average of indices	Number of parishes	Average of indices	Number of parishes
1665	100	56	100	76	100	132
1666	89	36	131	2	91	38
1667	89	45	110	65	101	110
1668	102	45	117	66	111	111
1669	92	45	140	66	120	111
1670	103	4	156	2	121	6
1671	84	45	158	66	128	111
1672	75	45	140	66	114	111
1673	57	45	130	66	100	111
1674	65	4	121	2	84	6
1675	77	45	124	65	105	110
1676	106	4	140	2	118	6
1677	56	4	99	2	70	6
1678	68	42	128	3	72	45
1679	89	42	132	65	115	107
1680	103	42	145	68	129	110
1681	86	40	158	68	131	108
1682	106	41	153	68	135	109
1683	101	42	126	27	111	69
1684	83	42	113	68	101	110
1685	148	42	156	67	153	109
1686	94	42	142	67	123	109
1687	105	42	167	67	143	109
1688	85	5	120	64	118	69
1689	114	40	150	64	136	104
1690	112	47	133	63	124	110
1691	132	45	151	69	143	114
1692	123	46	170	66	150	112
1693	83	43	102	45	93	88
1694	115	44	151	67	137	111
1695	75	42	115	65	99	107
1696	100	46	131	65	118	111
1697	57	45	87	65	75	110
1698	71	44	118	65	99	109
1699	108	47	105	66	106	113
1700	115	44	142	63	131	107
1701	106	46	100	63	103	109
1702	104	44	144	64	128	108
1703	88	45	123	65	108	110
1704	111	45	151	58	134	103
1705	80	45	99	66	91	111
1706	89	43	125	65	110	108
1707	79	45	108	66	96	111
1708	71	45	131	65	106	110
1709	51	42	117	66	91	108

1710	82	43	135	64	113	107
1711	100	44	127	64	116	108
1712	100	46	111	63	106	109
1713	122	44	133	63	128	107
1714	93	45	94	66	94	111
1715	112	46	166	64	144	110
1716	120	45	146	64	135	109
1717	81	45	113	66	100	111
1718	84	45	134	65	114	110
1719	77	45	77	66	77	111
1720	120	45	130	66	126	111
1721	91	46	98	66	96	112
1722	102	46	135	66	122	112
1723	78	46	105	66	94	112
1724	100	46	144	65	125	111
1725	102	45	159	66	136	111
1726	79	41	98	62	91	103
1727	114	46	134	64	126	110
1728	122	7	104	6	113	13
1729	150	14	148	6	149	20
1730	131	12	134	10	132	22
1731	155	13	162	12	158	25
1732	154	13	171	13	162	26
1733	156	12	127	15	140	27
1734	160	13	145	15	152	28
1735	154	8	121	13	134	21
1736	147	9	134	10	140	19
1737	167	9	182	10	175	19
1738	161	8	161	9	161	17
1739	152	8	159	8	156	16
1740	144	7			144	7
1741	117	10	127	15	123	25
1742	140	9	147	15	145	24
1743	128	9	147	6	135	15
1744	168	9	134	10	150	19
1745	133	9	151	9	142	18
1746	129	11			129	11
1747	166	6	145	10	153	16
1748	149	8	94	3	134	11
1749	181	6	156	3	173	9
Totals	99	2,797	129	3,883	116	6,680

Variables i database ”Närke och Värmland”

The page ”Grunddata”

Year

County 1913

Province

Bailiwick
 Standard district ???(ses page xxxxxxx)???
 Parish
 Wheat tithes in decibarrels
 Grain tithes in decibarrels
 Rye tithes in decibarrels
 Burnt rye tithes in decibarrels
 Tithes “reduced grain” in decibarrels
 Barley tithes in decibarrels
 Mixed barley tithes in decibarrels
 Oats tithes in decibarrels
 Pea tithes in decibarrels
 Bean tithes in decibarrels
 Tithes in unreduced decibarrels
 Tithes in decibarrels reduced grain (straw grain)
 Crown’s proportion of tithes
 Estimated harvest in decibarrels reduced grain
 Index (1665=100)
 Sources
 Remarks

Key to sources

Huvudböcker, Allmänna barnhusets arkiv (SSA)
 Landsböcker och verifikationer, Länsstyrelsen i Örebro län arkiv (ULA)
 Leijonhufvud = Excerpter från Lotta Leijonhufvud (underlag till Leijonhufvud 2001)
 Länsräkenskaper 1631–1820 Örebro län (Närke-Värmlands län), Länsräkenskaper 1631–1820 (RA)
 RA = Riksarkivet
 VaLa = Vadstena landsarkiv
 SSA = Stockholms stadsarkiv
 ULA = Uppsala landsarkiv

Östergötland

Lennart Andersson Palm

Administrative divisions

Östergötland county was formed in 1634 and corresponded in the main to the province of Östergötland. It was for a long time characterised by irregularities in the administrative divisions not least as regards tithes. It was sometimes divided into several smaller castle counties or bailiwicks. Overlaps occurred also with Jönköping, Kalmar and Södermanland counties. This is reflected in the archive structures.

One large bailiwick or castle county was *Vadstena county* that was included in Hedvig Eleonora's Life estate in 1660-1718. During its existence it constituted its own archive structure, the *Livgedinget*, with its accounts partly placed among the ordinary county accounts, the "länsräkenskaper" in the central National Archives, but partly as a separate archival equivalent to an ordinary county government accounts office's accounts, but here also placed in the central National Archives under the archival heading *Hedvig Eleonoras livgeding, Guvernementskontoret*.²⁹⁴ On some occasions at the beginning of our period of investigation, the Life estate's accounts are included among the National Archives county accounts for Östergötland county.

Stegeborg castle county also exists as a separate bailiwick among the central National Archives county accounts for certain years. Separate county's accounts, like those for Norrköping town, can be found in the archive for *Drottning Kristinas underhållsländer* 1655-1687. This county also had an equivalent to the county governments' county accounts offices with a number of series preserved in the National Archives in *Kungliga arkiv, Generalguvernören över drottning Kristinas underhållsländer*. In 1684, Stegeborg was also merged with Östkind district becoming a shared bailiwick.

Even at lower levels there were also peculiarities. One example is *Kristberg parish* that was divided between Aska, Boberg, Finspångalän and Gullberg's districts.²⁹⁵ *Malexander* is also a parish that has had complicated administrative belonging. The eastern part belonged to Vifolka district and Harg's cadastre parish, the southern part to Ydre district, where tithes were accounted for to Kinda and Ydres bailiwick. A further part of the parish belonged to Göstring district.²⁹⁶ Tithes from the two parishes' parts in Aska and Göstring came to be accounted for in Vadstena castle county's lists (at least from 1687). Kristberg's Boberg section and Malexander's Ydre section were given fixed tithes in 1687 and thereafter fall outside our sphere of interest. *Ekebyborna* parish was divided between Aska and Boberg districts where it later constituted less than half of the whole parish as estimated in assessed tax units, mantals.²⁹⁷ Initially Ekebyborna was reckoned to begin with by all accounts to belong under Boberg district (in Gullberg, Boberg, Valkebo and Vifolka bailiwick). Probably in connection with a tithes setting in 1715, the parish's part in Aska was transferred to Vadstena county bailiwick and its tithes appear from and including 1716 with unchanged amount (23.77 barrels of reduced grain) in that bailiwick's accounts.

In 1682, *Ödeshög* parish in Lysing district was added to Vadstena county. Previously the parish had belonged to *Visingsborg shire* and the transference may have had a connection with the dissolution of this and other shires in 1680 and following years.

²⁹⁴ In our period of investigation, the Life estate's accounts were included among Östergötland's in the National Archives.

²⁹⁵ Rosenberg 1881-1883, Lagerstedt 1973, p. 36.

²⁹⁶ Lagerstedt 1973, p. 37 f.

²⁹⁷ Rosenberg 1881-1883.

Some fiscal exclaves, *skatar*, also existed at the county borders, but their tithes conditions only affect our calculations marginally. The most important were:

- *Yxnerum skate*: Yxnerum parish in Östergötland was during our period divided between Skärkind, Bankekind and Hammarkind districts, but also had a part in Norra Tjust district in Kalmar county. The whole parish paid however its tithes in Skärkind district.²⁹⁸
- *Regna or Svennevads skate* in Närke province was small and paid tithes to Svennevad parish although the parish's main part belonged to Östergötland's Finspångalän district.²⁹⁹
- *Rumskulla skate*, i.e. the north-western part of Rumskulla parish, belonged to Ydre district. Tithes for the whole parish were however accounted for in Sevede district, Kalmar county.³⁰⁰

Simonstorp or *Sankt Pers kapell* belonged in the 1600s to *Kvillinge* parish in Bråbo district. The parish border to Stora Malm parish in Södermanland was unclear for a long time.³⁰¹ The eastern part of *Askeryd* parish, the so-called *Lägerbobygden*, belonged to Ydre district, but its tithes were accounted for in Norra Vedbo district in Jönköping county.³⁰²

This review of administrative irregularities in the county is not at all complete. The significance for our tithes series has not been possible to sort out in detail here, but should as a rule be small since the peculiarities were in general not changed during the period of our investigation.

Bailiwicks

In 1665 and for a time onwards, the following bailiwicks existed:

- *Finspångalän* or *Bergslagen*
- *Gullberg, Boberg, Valkebo and Vifolka* districts
- *Kinda* and *Ydre* districts
- *Linköpings län*: Åkerbo, Bankekind and Hanekind districts. (Please note that "Linköpings län" later became an alternative designation for the whole of Östergötland county)
- *Norrköpings län*: Bråbo, Lösing, Memming, Skärkind districts
- *Stegeborgs län*: Hammarkind and Björkekind districts
- *Vadstena län*: Göstring, Aska, Lysing and Dal districts
- *Östkind's fögderi* or *Skenäs län*: Östkind district

Before 1687, Östkind was accounted for as an independent bailiwick in the Soldiers' home bailiwick summaries. In 1682 it is called *Skenäs län*. In 1682-1686 it had the same bailiff as Stegeborgs län and is said at least in the source materials examined for 1687-1689 to constitute a shared county with the latter. From and including 1690, Stegeborg and Östkind were included under *Lösing, Björkekind* and *Östkind bailiwick*. At the same time, Hammarkind and Skärkind were broken out of their earlier bailiwicks and together formed a new bailiwick. From and including 1690, bailiwick division was as follows:

- (New) *Finspång* bailiwick (now Finspång, Bråbo and Memming districts)
- *Gullberg, Boberg, Valkebo och Vifolka* bailiwick
- *Hammarkind och Skärkind* bailiwick
- *Kinda och Ydre* bailiwick
- *Lösing, Björkekind och Östkind* bailiwick

²⁹⁸ Lagerstedt 1973, p. 54.

²⁹⁹ Lagerstedt 1973, p. 99.

³⁰⁰ Lagerstedt 1973, p. 39.

³⁰¹ Lagerstedt 1973, p. 29.

³⁰² Lagerstedt 1973, p. 39.

- *Linköping* (new) bailiwick consisting of Åkerbo, Bankekind and Hanekind districts
- *Vadstena län*: Göstring, Aska, Lysing and Dal districts

With certain modifications at the beginning of the 1700s, this division lasted far into the 1800s. These modifications were: Vadstena län was divided up after 1713 into first two bailiwicks, partly *Dal och Lysing*, partly *Aska och Göstring*. In 1723, (?) in its turn redivided between on the one hand *Lysing, Dal och Aska fögderi med Hovs socken (parish)*, as well as on the other *Göstring och Vifolka fögderi* (Göstring then minus Hov parish section). In connection with this, *Gullberg, Boberg, Valkebo and Vifolka bailiwick* lost its part of Vifolka and became only *Gullberg, Boberg and Valkebo bailiwick*.

A common division of Östergötland county is *Östergötland Västanstång* and *Östanstång* (in relation to the river Stångån). To the former part was reckoned *Kinda och Ydre, Gullberg, Vifolka, Boberg, Valkebo, Vadstena and Linköping* bailiwicks. Östanstång included Finspång, Norrköping, Stegeborg bailiwicks as well as Östkind district.

Source materials

Crown accounts

The great gaps in the parish tithes information that is available for research in the National Archives' county accounts for the end of the 1600s has made it particularly urgent to search for alternative sources. On the first hand, the Östergötland county accounts' office's series in the Vadstena regional National archives have been used, and in a few cases, parish-wise information has been found in various district scribes' archives (Sw. häradsskrivarearkiv) also in the regional National archives. However, here too there are a number of gaps.

Soldiers' home barrel

For most investigations, bailiwick-wise information exists on the 40th part of the unreduced tithes which for Östergötland and completely according to regulations were handed in as support for the Vadstena Soldiers' home. They are included in the Krigskollegium's Soldiers' home accounts (main ledger and verifications) in the War Archives (now part of the central national archives).³⁰³ A comparison with the county accounts shows that the number of Soldiers' home barrels correspond in numbers to the tithes lists' number of barrels in levelled-off measure divided by 40.

Measuring vessels' volume, measuring barrel

The new measures that were introduced according to the proclamation of 10 March 1665 are reflected clearly in the source materials. For Kullerstad parish, tithes are said in 1665 to be estimated with excess measure and 56 Swedish pottles to the barrel "after the regulation", i.e. according to the Stiernhielm measurement reform. For several parishes, "the new measure" for 56 Swedish pottles "was adjusted for each barrel" and similar.³⁰⁴

However, the new measuring vessel volumes caused a certain confusion at first. In 1666 it is said that for Askeby parish: "After as now since the measure was adjusted, it is uncertain how many p(ottles) should be counted to the *halvspann* (= two Swedish firkins), because for later correction one allows ... the sums to stand open".³⁰⁵ The worry seems here to have been the volume of the Swedish pottle, not the volume of the spann.

That it was only the pottle that was adjusted through the measurement reform in 1665 was also intimated by the following notes in the extract over Stegeborg's tithes in 1669: first on the debit page the tithes are taken up "according to the lists", and thereafter "the over measure or excess measure on

³⁰³ In contrast to what was valid for other counties' corresponding commission to the Stockholm Orphanage, the accounts concern the harvest year (the year tithes were handed in).

³⁰⁴ Länsräkenskaper Östergötlands län 1665, RA.

³⁰⁵ Länsräkenskaper Östergötlands län 1666, RA.

the above named church tithes ... after 1638 parliamentary decision 2 kappes to each barrel, that then and later was 3 pottles, but is now estimated as 2 kappes for 3 ½ pottles after His Royal Majesty's Proclamation on 10 March 1665 ...".³⁰⁶ Kappes were thus still 32 per barrel from 1665 and onwards.

For Östra Ryd parish is written in 1666 in a notice beside the parson Magnus Theseus' summation in the tithes list: "Not to be permanent since the barrel is reckoned as 48 pottles and firkins at 6 pottles".³⁰⁷ One further notice there, probably by some accountant, says "After Kongl. Proclamation's content shall be reckoned 7 pottles to a Swedish firkin and 56 pottles to 1 barrel, therefore 50 barrels and 22 pottles. What has caused this insignificant difference? A closer investigation of Östra Ryd's tithes list shows that the parish's individual tithes givers individual tithes in barrels and Swedish firkins were accepted by the accountant. Most tithes givers account for most of their tithes in Swedish firkins. Apart from this, they account normally for no or only a few pottles, between 0 and 5. Later it is only these few pottles that are recounted to 7 instead of 6 per Swedish firkin at the summation of the entire parish's tithes.³⁰⁸ This must be interpreted as that the barrel that is accounted for in the summation has been the official one divided into 54 pottles before and 56 Swedish pottles after 1665.³⁰⁹ The parson and accountant have been in agreement about barrel size and that there were eight Swedish firkins to a barrel, but thus had different views on how many firkins the Swedish pottles that individual peasant farmers had been debited were equivalent to. Once again, the issue is thus only the Swedish pottles.

Among others Björn Helmfrid had the opinion that the barrels in the tithes lists' summations in 1638-1664 were rather more than 14 % fewer than 1665 and the following years.³¹⁰ However, the differences in measured tithes volumes before and after the measurement reform were minimal as has been shown, in Östra Ryd they only amounted to about one percent. These examples show that in Östergötland in the 1660s at least, it was understood that it was only the pottle that was changed; the barrel, the halvspann, the firkin and the kappe were considered to have remained unchanged.³¹¹

In Björn Helmfrid's field of investigation round Norrköping, in tithes contexts from and including 1737 there was a change from counting in Swedish pottles to kappes of which there were 32 to the barrel. Björn Helmfrid sets this in connection with the 1737 new regulation about measurement and weight. The same conditions were seen to exist in the rest of the county, where kappe counting later continues for the entire period of our investigation.

The barrel as measuring unit, measuring method, excess measures

In Östergötland's tithe lists, individual peasant farmers' tithes were in levelled-off barrels during the whole of our period of investigation in accordance with the 1638 tithes proclamation that assumes that tithes lists were compiled first and the excess measure was added upon delivery to the tithe barn.³¹² One peculiarity for Östergötland is that the bailiwicks' tithes extracts from and including 1690 were provided with two special columns, one for tithes in levelled-off measures, and one for "over measure or excess measure". The only exception was Vadstena county's bailiwick that right up until the introduction of fixed tithes there in 1731 only had one unspecified column. Special calculations concerning the Vadstena län districts Aska and Göstring in the extract over the 1717

³⁰⁶ Länsräkenskaper Östergötlands län 1669, RA.

³⁰⁷ Länsräkenskaper, Östergötlands län 1666, RA.

³⁰⁸ Compare Björn Helmfrid 1949, p. 10.

³⁰⁹ In a project report, Lennart Palm (2012) considered that the barrel in the county had been the same size before and after 1665. Palm used among others Göran Hansson's investigation, *Spannmålsmått i Östergötland under 1600-talet*, unpublished manuscript, as support. Hansson could not find any great fall in the average number of tithes barrels before and after the 1665 measurement reform, that should have occurred if the barrels had been made bigger in 1665.

³¹⁰ Björn Helmfrid 1949, pp. 10, 12, 15, 41, 176, diagram 1. He considered thus that the pottle was the fixed measure whereas the barrel's volume varied, not vice versa. Staffan Helmfrid and later Lotta Leijonhufvud also agree to the same assessment (Staffan Helmfrid 1962, p. 4, n. 2; Leijonhufvud 2001, p 268).

³¹¹ Compare Morell 1988, p. 33 ff.

³¹² Compare also Björn Helmfrid 1949, p. 12 ff.

tithes show however that the extract sums, at least then, corresponded to the tithes in levelled-off measure according to the tithes lists.³¹³ How was it in Vadstena län before 1690? In the investigated extracts, nothing emerges about the measuring method those years. A number of comparisons between extract and tithes lists show however the same amounts. My interpretation is that tithes in the extracts are barrels with excess measure, but in number equally as many as the original tithes lists' levelled-off barrels.

Concerning the bailiwick sums taken from the Soldiers' home accounts, it appears from several copies that they show the number of barrels collected with excess measure.³¹⁴ The 40th part has there, according to the rules, been estimated on tithes in levelled-off barrels, that upon delivery have been given excess measure. Numerically, the number of Soldiers' home barrels thus reflects 1/40 of the givers' tithes in levelled off measure.

Tithes systemet

Stook counting and test threshing were probably normal in this province during the whole of our period of investigation. Björn Helmfrid saw for Östergötland's part as early as in the 1663 accounts the results of the same year's regulation about this; after this they generally counted the number of stooks, test results and estimated tithes each in a separate column. However, sometimes Helmfrid searched in vain for test threshing results, which he explains by the fact that the number of stooks and tests were written on special lists that had not been bound into the accounts. The test threshing figures he found in the lists or special reports were of varying quality, sometimes threshing-tests were carried out for only one peasant farmer per village, sometimes for all the parish's peasant farmers. Equalisation of the yield figures to the even numbers 12, 10, 8 and 6 Swedish pottles per stook, that simplified the calculations, could be observed in some places, but not in others.³¹⁵

There are examples of the fact that in certain Östergötland communities it was to begin with so-so with test threshing. Thus in 1689 in Hammarkind district complaints were made that the peasants there had estimated in a traditional way and not known of the demands for test threshing and handing in the clergy's own stook ("rök") lists (Sw. stubbelängder).³¹⁶ I share Björn Helmfrid's assessment anyway that stook counting and test threshing hereafter had a breakthrough in the county and at least from and including 1691 I reckon on the crown's control demands being strictly adhered to throughout Östergötland.³¹⁷

According to culture geographer Axel Wennberg, harvests from slash-and-burn agriculture were not included in the fixed tithes settings.³¹⁸ That their harvests were included in the harvest-dependent tithes, totally in agreement with valid regulations, emerges however from several

³¹³ Hedvig Eleonoras livgeding, guvernementskontoret, FII B:1, RA.

³¹⁴ In 1666 and 1667, the excess measure ("övertälet") was accounted for separately by the Soldiers' home, a custom that ceased however from and including 1668. Hereafter, nothing is as a rule mentioned about the excess measure, but in among others 1673 and 1678 it was written expressly that excess measure was intended.

³¹⁵ In the 1668 Soldiers' home accounts in KrA there is a copy on p. 68 of an extract of a resolution from 30 April 1669 concerning the measuring method for the Soldiers' home barrels: it emerges there that the paralysed soldiers in the provinces "at the former distribution" had been given grain with excess and same measure "as it was brought in" and that according to incomes and costs officials' suggestions via the district bailiffs in some places, "thus the Collegium is content with this being the rule for the future and the accountants do not have to go to the tithe barns to level off the excess". Here it emerges that the Soldiers' home barrel was taken in including excess measure. One peculiarity appears concerning Vadstena castle county in 1669, namely that excess measure was not counted for wheat. In the database's estimations of "reduced grain", no attempt has been made to investigate the extent of this custom. Wheat constituted a very small part of the total tithes. The delivery form with excess measure exists during the entire period of investigation, see e.g. the accounts in 1708 for Åkerbo district, 1727 for Göstring and 1765 for Ringarum and other parishes.

³¹⁶ Björn Helmfrid 1949, p. 73 ff.

³¹⁷ Länsräkenskaper Östergötlands län, landsbok, s. 1626, RA.

³¹⁸ Helmfrid 1949, p. 78. Compare *ibidem* p. 100.

³¹⁹ Wennberg 1947, p. 60 and n. 11 there. County governor Stålarb had originally ideas about only having rye and barley delivered. Compare Björn Helmfrid 1949 p. 130.

examples.³¹⁹ Source materials for Östergötland most often take up wheat, oats and peas and on some occasions even beans. For Norrköpings län in the 1660s and 1670, “oats and mixed grains” are shown together. In much of the material, especially in the extracts, rye and barley are often taken together under the heading “grain”.

In most areas in Östergötland, tithes were divided in the usual way between the crown and the clergy, i.e. with 2/3 to the former, and 1/3 to the latter. However, a few exceptions were found. In the parishes of Grebo, Värna, Björsäter and Vårdnäs, and judging from the tithes lists, even Kristberg they were divided 50/50 between crown and parson and in the districts of Göstring, Vifolka and Gullberg, it happened that certain independent farms handed in their entire tithes to the parson.³²⁰ In Kvarsebo, the pastor kept the entire tithes himself according to a royal missive from 11/9 1628.³²¹

From Duke Johan Casimir of Stegeborg's time (he died in 1652), the “island inhabitants” of Skällvik and Gryt parishes paid no tithes in natura in contrast to the other farmers in those parishes. They paid instead 1 1/3 *daler silvermynt* per stook (here “neke”!) and it emerges from the lists that they as a rule only had a handful or so of those. In Finspång mining district areas in Skedvi, Vånga, Godegård, Hällstad, Risinge and Tjällmo parishes tithes were also paid in currency.³²² In the project's tithes series for Östergötland are only included tithes paid in natura. This means that the tithes mentioned in currency provide a certain underestimation in harvest estimates, and at the same time it should be noted that the areas mentioned had probably fairly insignificant cultivation of grain, which was probably the reason for paying in currency instead of grain.

Fixed tithes settings

The first fixed tithes settings, for which Östergötland's county governor Axel Stålbom belonged to the pioneers in the 1680s, have been dealt with in detail by among others Björn Helmfrid.³²³

Parts of Östergötland gained fixed tithes as early as and including 1687. **The basis for the county's tithes settings was to assess the farms' grain for sowing and harvest/seed ratios.** These procedures have left behind them interesting source materials from the point of view of agrarian history.³²⁴

On going through available source materials, it appeared that tithes settings were not always immediately implemented in praxis, as well as in some cases fixed tithes were applied for certain years, after which harvest-dependent tithes were reinstated for a time. The following table shows which periods from and including 1665 harvest-dependent tithes were applied in the county's districts:

³¹⁹ See e.g. lists for Hanekind and Björkekind in 1666 that have a common filled-in column for “field and swidden rye”.

³²⁰ Lars Gustaf Linde 1887, p. 297.

³²¹ Lagerstedt 1973, p. 30.

³²² See tithes accounts among Länsräkenskaper, Östergötlands län, RA, for example the *landsbok* for 1680.

³²³ Björn Helmfrid 1949, p. 128 ff; Wennberg 1947, p. 197, on fixed tithes in Finspång county and Kvillinge in 1687 (Melander's beskrivningsbok).

³²⁴ Among others, lists over fixed tithes for Aska and Broberg districts in 1714 contain information on grain for sowing (Hedvig Eleonoras livgeding, Guvernementskontoret, FII B:1, RA). The 1726 tithes setting has left behind registers over each farm's “grain for sowing” in tunnland (1 tunnland = 1.22 acre) and projected tithes for parishes that at that time still had harvest-dependent tithes (in Kammarkollegiet, 1. provinskontoret, nummerserie nr 93:6, RA). Björn Helmfrid 1949 p. 139 f., 142 f. From 1754 there is similar information in the Crown tithes list (Crono Tijondelängd), Östergötlands länsstyrelses arkiv, landskontoret, volym GIIIj 2, VALA.

Periods with harvest-dependent in Östergötland

District	Period
Aska	- 1731
Bankekind	Mostly – 1686, three parishes – circa 1715
Björkekind	Kuddby-1728, rest gained fixed in 1743 and 1750
Boberg	Parts - 1686, rest – circa 1715
Bråbo	Kvillinge 1686, Östra Eneby -1753
Dals	- 1730
Finspångalän	- 1687
Gullberg	Björkeberg – 1689?, rest - 1715
Göstring	- 1730
Hammarkind	Some parishes – 1739, other parishes successively - 1760
Hanekind	- circa 1715
Kinda	To and fro -1686-1690, harvest-dependent again 1704-1715, after that again fixed
Lysing	- 1730
Lösing	Varying – 1716-1759, sometimes in between returning to harvest-dependent
Memming	- 1739
Skärkind	- 1739, other parishes successively - 1760
Valkebo	Ledberg and Rappestad – 1686, rest - 1715
Vifolka	Partly – 1686, partly - 1714
Ydre	- 1687
Åkerbo	Partly – 1686, partly - 1714
Östkind	Partly – 1686, rest - 1749

Tithes settings in 1687 must be seen as Stålbarm's project, the settings round 1715 were caused by a push from the clergy who complained of an asserted great swindle with tithes in which they, who had their salaries from tithes, "often more than in half measure came to suffer".³²⁵ Around 1730, a further number of parishes agreed on contracts. According to *Bondeståndets Riksdagsprotokoll* 19/11 1726, the county's peasantry except for those farmers in Vadstena castle county, were then positive to fixed tithes. Just like in Vadstena county, the island farmers who as we saw paid in currency, continued with harvest-dependent tithes. According to the protocol 27/2 1731, even Vadstena had then become positive, while on the other hand Hammarkind district now wanted to continue with harvest-dependent tithes. It was first with the transition to fixed tithes in some parishes in Hammarkind and Skärkind bailiwicks in 1761 that the process that started in the 1680s was concluded in Östergötland. A tough tug-of-war can be divined sometimes between on the one side the crown and other tithes recipients and on the other, the peasant farmers.³²⁶

Harvest estimates

Harvest estimates have, as is the case with other areas in the project, begun with establishing how great a part of the **harvest the Crown's tithes have** corresponded to in various parts of Östergötland with consideration to tithes division between the crown and the clergy. Normally, the crown retained 2/3 of the total tithes, which meant that the crown's tithes must be multiplied by 15 to correspond to

³²⁵ Wennberg 1947, p. 193 n. 43. Björn Helmfrid 1949 takes up taxation in 1716 (p. 133, 142, 145), and 1715 (p. 139).

³²⁶ See the example Östra Eneby where in 1716 stooks were counted and test threshing carried out in the usual way, but where the peasants still had to pay fixed tithes. As early as 1717, the parish returned however to ordinary harvest-dependent tithes. Björn Helmfrid 1949, p. 142.

the tithes-due harvest. Several deviations from this norm occurred however in Östergötland. For Vårdnäs parish, where the crown and the clergy shared tithes 50/50, the “tithes harvest” is calculated by multiplying Crown tithes by 20. The same is true for tithes-setting lists in Kristberg, Björsäter, Grebo and Värna parishes. Another unusual thing occurred in Göstring, Vifolka and Gullberg districts; a number of independent farms there paid their total tithes to the parson.³²⁷ This situation has been noted for Järstad and Skrukeby parishes in Göstring, and also for Väversunda in Dal district. At harvest estimating, consideration has necessarily been taken to these conditions. After this, a markup for units not eligible for tithes has been undertaken according to usual methods within the project. For Östergötland, five pieces of information about mantals of land have been sought (for 1668, 1680, 1692, 1705 and 1718) from the county accounts’ ledgers in the central National Archives. Finally, a surcharge has been made with 10 % for assumed underestimation during measuring etc. The different markings-up per period are shown in the following table:

Parameters at harvest estimates for Vadstena castle county

Period	Marking-up factor for tithes	Multiplicator for harvest estimates
1665-1679	1.109	18.29
1680-1691	1.113	18.37
1692-1704	1.094	18.04
1705-1717	1.085	17.90
1718-1730	1.084	17.88

As is apparent from the table, the factors only changed by 2-3 percent between periods. This is really not that surprising since in principle the same farm categories were tithes exempt during the entire period. The Vadstena calculations may possibly, probably insignificantly, be somewhat too low because of the above-mentioned peculiarities in the parishes Järstad, Skrukeby and Väversunda.

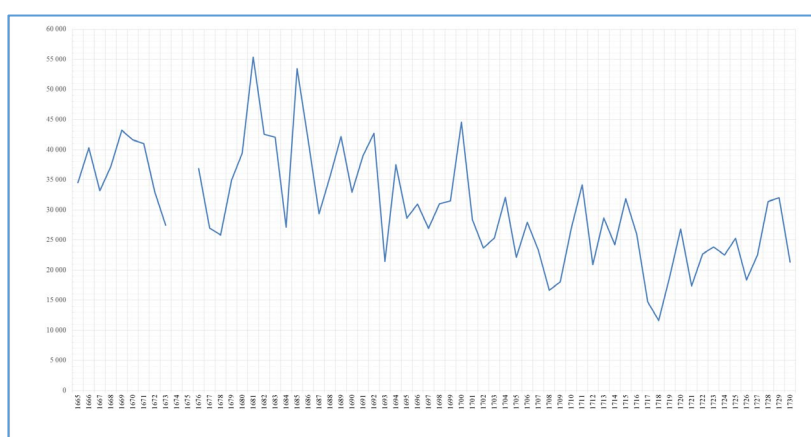
On account of the many gaps in the county’s accounts source materials and the varying times for transference to fixed tithes, the project database’s harvest estimates are in the main based on bailiwick information from the Stockholm Orphanage’s main ledgers in the Stockholm city archives. On account of deficiencies in the source materials, I must be satisfied with accounting for estimated volume harvests for Vadstena castle county, an area with relatively good source materials, compared with other parts of the county.

The estimated harvest development is shown in the following diagram³²⁸:

³²⁷ See Rabenius 1853, p.48; Thurgren 1859, p. 36; Lars Gustaf Linde 1887, p. 295, n. **.

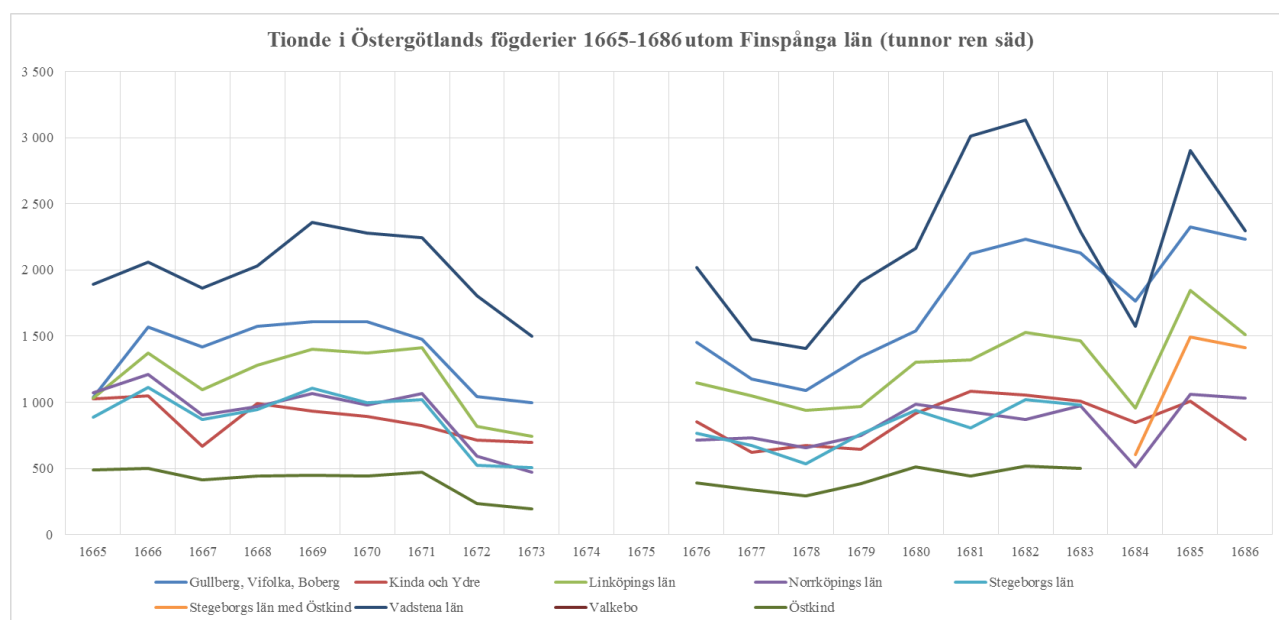
³²⁸ A couple of parishes with fixed tithes are included in the Vadstena estimate, which means an inconsiderable evening-out between the years.

Estimated harvests in Vadstena castle county in 1665-1730 (barrels of reduced grain)



Vadstena castle county's area included both parts of the lime-rich and fertile Östgöta plain and parts of southern Östergötland's broken forest areas. Much speaks for our having chosen an altogether quite typical area for the county seen from the perspective of agriculture. Tithes development in the area's bailiwicks during the period before fixed tithes started to be introduced in 1687 in the following diagram indicate this, as does a comparison with the index calculations for the whole county made below.

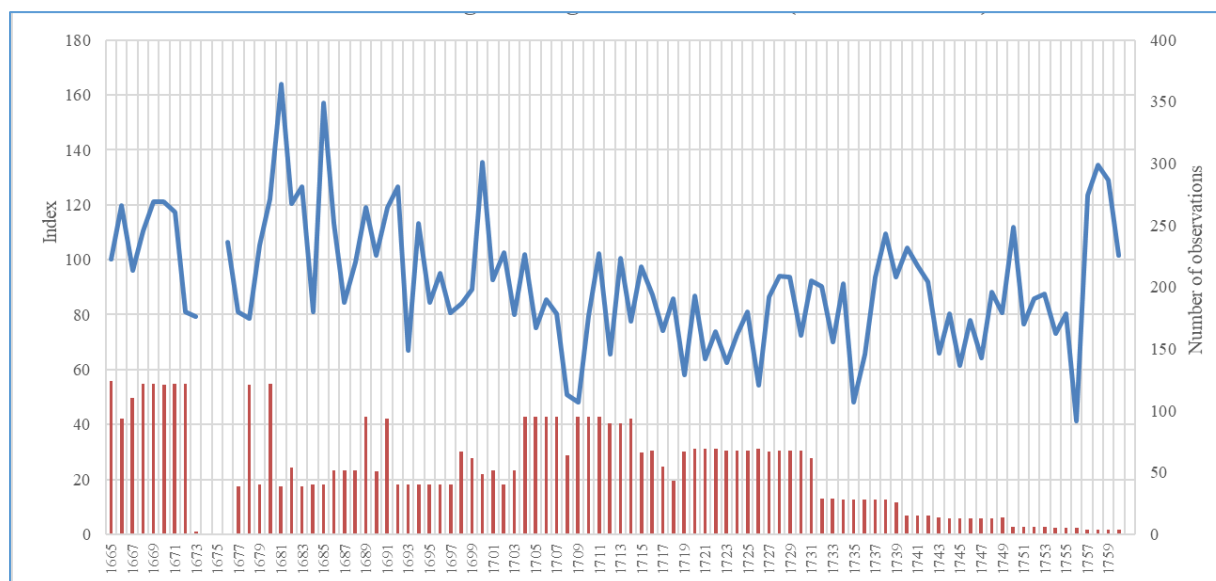
Tithes in Östergötland's bailiwicks 1665-1686 except for Finspångalän (barrels of reduced grain)



The file "Grunddata" contains the parish information for the whole of Östergötland that has been found as well as the district or county figures where parish information is missing. I have chosen not to make any calculations of the harvest volumes in the file (with the exception of Vadstena county) but stopped at estimating an index (1665=100) over tithes to capture harvest development in the whole county. Only parishes with information for 1665, the great majority however, have been used and the diagram's index is constituted by yearly averages for the recently mentioned pieces of

information. In the following diagram, tithes development is shown for 1665-1760. The diagram shows also the number of observations that each yearly average index respectively is based on.

Tithes development in Östergötland 1665-1760 (index 1665=100) and number of observations



It should be noted that index builds on geographically varying data under different periods, sometimes one parish is missing, sometimes another district is missing. As the parishes have gained fixed tithes, so they have fallen out of the index. The number of parishes with information sinks thus as time goes on and finally there are only four left! With these serious reservations, I leave it to database-users to interpret the later years of the diagram's curve.

Other

Östergötland's early-modern agriculture has been treated in unusual detail by researchers. Among those who have written about tithes, the following may be noted: Erik Bergsten and Staffan Helmfrid on Östergötland Västansångs, Axel Wennberg on northeastern parts of the province, Björn Helmfrid on Östra Eneby parish just north of the town of Norrköping.³²⁹ The two first-named do not touch so much on the period of the current investigation, Björn Helmfrid's work on the other hand does to a great degree. The latter's book has become something of a standard work on tithes and his conclusions are often in strong opposition to those of Wennberg.

³²⁹ Bergsten 1946; Staffan Helmfrid 1962; Björn Helmfrid 1949; Wennberg 1947.

Tithes in Östergötland 1665-1760 (index 1665 = 100)

1665	100	124
1666	120	94
1667	96	110
1668	111	122
1669	121	122
1670	121	121
1671	117	122
1672	81	122
1673	79	2
1674		
1675		
1676	107	1
1677	81	39
1678	79	121
1679	105	40
1680	122	122
1681	164	39
1682	121	54
1683	127	39
1684	81	40
1685	157	40
1686	113	52
1687	84	52
1688	99	52
1689	119	95
1690	101	51
1691	119	94
1692	127	40
1693	67	40
1694	113	40
1695	85	40
1696	95	40

1697	81	40
1698	84	67
1699	89	62
1700	136	49
1701	93	52
1702	103	40
1703	80	52
1704	102	95
1705	75	95
1706	86	95
1707	81	95
1708	51	64
1709	48	95
1710	80	95
1711	102	95
1712	66	90
1713	100	90
1714	78	94
1715	97	66
1716	87	68
1717	74	55
1718	86	43
1719	58	67
1720	87	69
1721	64	69
1722	74	69
1723	63	68
1724	73	68
1725	81	68
1726	54	69
1727	86	67
1728	94	68

1729	94	68
1730	72	68
1731	92	62
1732	90	29
1733	70	29
1734	91	28
1735	48	28
1736	66	28
1737	94	28
1738	110	28
1739	94	26
1740	104	15
1741	98	15
1742	92	15
1743	66	14
1744	80	13
1745	62	13
1746	78	13
1747	64	13
1748	88	13
1749	81	14
1750	112	6
1751	77	6
1752	86	6
1753	88	6
1754	73	5
1755	81	5
1756	41	5
1757	124	4
1758	135	4
1759	129	4
1760	102	4

Variables in the database "Östergötland"

The page "Grunddata"

Årtal = Year

Län 1913 = County 1913

Landskap = Province

Standardhärad = Standard district (see p. xxxxxxxx)

Fögderi = Bailiwick

Socken = Parish

Vetetionde i strukna decitunnor = Wheat tithes in levelled-off decibarrels

Spannmål i strukna decitunnor = Grain tithes in levelled-off decibarrels

Rågtionde i strukna decitunnor = Rye tithes in levelled-off decibarrels

Svedjerågtionde i strukna decitunnor = Burnt rye tithes in levelled-off decibarrels

Korntionde i strukna decitunnor = Barley tithes in levelled-off decibarrels
 Blandsädtionde i strukna decitunnor = Mixed grain tithes in levelled-off decibarrels
 Havretionde i strukna decitunnor = Oats tithes in levelled-off decibarrels
 Ärttionde i strukna decitunnor = Pea tithes in levelled-off decibarrels
 Böntionde i strukna decitunnor = Bean tithes in levelled-off decibarrels
 Totalt stråsädstionde i oreducerade decitunnor = Total straw grain tithes in unreduced decibarrels
 Totala tiondet i decitunnor ren säd (exkl. ärtor och bönor) = Total tithes in decibarrels reduced grain (excl. peas and beans)
 Beräknade skördar Vadstena län i decitunnor ren stråsäd = Estimated harvests Vadstena county in decibarrels reduced straw grain
 Källa = Sources

The page "Fögderisummor" – tithes per bailiwick

Årtal = Year

Fögderi = Bailiwick

Rågtionde i strukna decitunnor = Rye tithes in levelled-off decibarrels

Svedjerågtionde i strukna decitunnor = Burnt rye tithes in levelled-off decibarrels

Korntionde i strukna decitunnor = Barley tithes in levelled-off decibarrels

Blandsädtionde i strukna decitunnor = Mixed grain tithes in levelled-off decibarrels

Havretionde i strukna decitunnor = Oats tithes in levelled-off decibarrels

Ärttionde i strukna decitunnor = Pea tithes in levelled-off decibarrels

Böntionde i strukna decitunnor = Bean tithes in levelled-off decibarrels

Totala tiondet i decitunnor ren säd = Total tithes in decibarrels reduced grain

Källa = Sources

Key to sources

40*krigsmanshusavgiften, KrA = 40 * Soldiers' home barrels, Krigsarkivet

40KrA = uppgiften bygger på multiplicering av krigsmanshusdecitunnor i Krigsarkivet

Fögderisumma från "Fögderisummor" = Fögderisiffra för vissa år där sockendata saknats

Helmfrid 1949, diagram 1 = uppgift från Björn Helmfrid 1949, diagram 1.

Hskr Lösing m fl VLA = Häradsskrivarens i Lösings m.fl. fögderi arkiv, Vadstena landsarkiv

KrA = Krigsarkivet = War archives, now part of central National archives

RA = Riksarkivet = central National archives

RA HEL = Information from the archives of Hedvig Eleonoras Livgeding in the central National archives

RA landsbok länsräk Livgedinget = Länsräkenskaper Livgedinget, landsbok, in the central National archives

RA landsbok ÖG = Länsräkenskaper Östergötlands län, landsbok, in the central National archives

RA LB = Länsräkenskaper, Livgedinget, in the central National archives

RA Livged guvernementskontoret GI:48 = Livgedingets arkiv, guvernementskontoret, volym GI:48, in the central National archives

RA länsräk ÖG = Länsräkenskaper Östergötlands län, in the central National archives

RA länsräkensk Livgedinget = Länsräkenskaper, Livgedinget, in the central National archives

RA verifikationer ÖG = Länsräkenskaper, Östergötlands län, in the central National archives

VALA = Vadstena landsarkiv, regional National archives in Vadstena

VALA Östergötlands landskontor, verifikationer (serie E1b) = Vadstena landsarkiv, Länsstyrelsen i Östergötlands län, landskontoret, landsboksverifikationer (serie E1b)

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