A real-estate price index for Stockholm, 1726–1875

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1. Introduction

This chapter presents new, nominal and real price indices for real estate in Stockholm from 1726 up to 1875.[1] The previous chapter presented an index of Stockholm house prices up to 1730, but focused on the Old Town before 1730, and, given that addresses could not be collected for most of the properties, applied a hedonic price method. The period 1726–1729 is also presented in this chapter as an overlapping period. The new series presented here can be linked to already existing price indices for real estate in Stockholm: first from 1875 up to 1957;[2] from 1957 to 1975[3] and from 1975 up to 2020.[4] As discussed in the previous chapter, prices outside of the Old Town increased faster than in the Old Town during the 1720s. If trends in house prices in various parts of a city diverge substantially, it will be a major challenge to interpret the development, something which is further discussed in this chapter for the period 1726–1875.

For the new series covering the period 1726–1875, a new database is used that covers registered real-estate transactions in the present inner city of Stockholm for the period and the method of repeated sales is applied. The indices are based on information from 22,169 unique transactions. To control for qualitative changes in the housing stock, a database of 7,915 issued building permits has been used.

The structure of the chapter is as follows. Section 2 describes the sources. Section 3 discusses methodological issues when constructing a historical real-estate price index. Section 4 describes our database. Section 5 presents and discusses the real-estate index.

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2 Edvinsson, Blöndal, and Söderberg 2014.
3 Sandelin 1977; presented in Edvinsson, Blöndal, and Söderberg 2014.
4 Statistiska Centralbyrån, 'Fastighetsprisindex (FASTPI) för permanenta småhus, efter län och år'.

2. Sources

There are many ways to assess historical real-estate prices. The two primary sources are information about real-estate transactions and assessment values like, for instance, taxation registers. The present study builds on information about real-estate transactions. This can be found in the archive of Stockholm City Council, today maintained by the Stockholm City Archives.

Housing transactions

Stockholm City Council, as well as the rest of Sweden, historically used a system of what was called "uppbud". This meant that every sale of a plot of land and/or a building was announced publicly three times in three successive court sessions. This system was established to give relatives, neighbours and others in close connection to the seller an opportunity to protest against the planned sale. This protest gave these individuals a chance to put forward arguments for why they should have the right to buy the land and/or house instead of the buyer(s) suggested during the court sessions.

Our primary sources for the 18th and 19th centuries (more specifically from 1725 and onwards) are the so-called Legal and procurement protocols or "uppbudsprotokoll" in Swedish (Stockholms stadsarkiv, Stockholms magistrat- och rådhusrätt, A 6 a Lagfarts-, uppbuds, protokoll). Following each court session, protocols of each "uppbud" were drafted by City Council employees. In this study, the protocol that was drafted after the first court session is used. No matter who was deemed the rightful buyer in the end, the price stayed the same throughout the proceedings.

The legal and procurement protocols contain information about the name and profession of the seller and buyer, the location of the property (including parish, street name, the name of the block and the number attached to the specific plot or house), relevant dates (both date of purchase and date of registration), whether the property was on free or unfree land,[5] and prices. The present study mainly uses these protocols to build a database of housing transactions.

Until year 1800, the protocols also included information about house type. The most common types were wooden houses (Swe: *gård*) and stone houses (Swe: stenhus). Examples of other types of real estate are gardens, windmills and graves. After 1800, stone houses and wooden houses are both referred to as "property" (Swe: *fastighet* or *fast egendom*). We have only included wooden houses and stone houses in our dataset. Because of the change of praxis from 1800, we have not used the information about house type when constructing the index. Instead, we have used building permits to control for changes of house type at specific addresses.

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5   An unfree property was located on land that was owned by the City, and the owner had to pay a regular fee to the City for usage. Sometimes when an unfree property was sold, the buyer could also pay the City for a "fribrev", paying a fee, which made the property free. In the Old Town, the properties that were sold were free, which is also one reason why focusing on the Old Town enables us to follow properties of similar type.

The data do not allow us to make a distinction between residential and commercial properties. In many cases, the properties sold may well have been used for both purposes. It was not uncommon for part of a building to be used as a workshop, shop or warehouse. Some parts could be used by the owner's household, others could be let to third parties.

Figure 7.1 below gives an example of what an uppbudsprotokoll looked like. It also shows what that specific record looked like in the Estate Register "Fastighetsregister 1675–1875",[6] a card register stored at the Stockholm City Archives. The card register

Figure 7.1: *"Uppbud"-protocol from 1753 and the same sale in the Estate Register.*
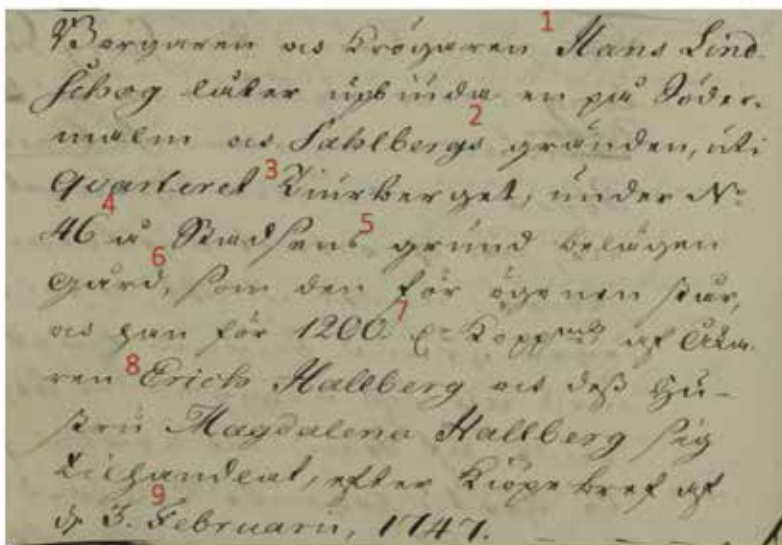
Source: Stockholms stadsarkiv.

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6   Stockholms stadsarkiv. Fastighetsregister 1675–1875. https://sok.stadsarkivet.stockholm. se/?template=view_post&id=153 [2020-04-26]

is discussed in more detail below, under the section on house numbers. In the specific protocol seen in this picture, the following information can be found: 1) the title and name of the buyer; 2) the street name of the property; 3) the block name; 4) the block number; 5) if the land is included in the transaction or if it is owned by the city; 6) the house type; 7) the price; 8) the title and name of the seller(s); 9) the date when the contract was signed. The numbers in the picture of the protocol correspond to the numbers in the picture of the card register. As can be seen, the card register does not include any price information.

Example of a sales contract

The information about real-estate transactions in the protocols was collected from sales contracts. Most of it still remains in the archives. The information that can be retrieved from the contracts differs, but they often include more details than the protocols.

Figure 7.2 exemplifies a sales contract from 1756 for a property in the Old Town. The property was sold for 162,000 daler kopparmynt, which at that time was equivalent to approximately 81,000 days wages for an unskilled laborer.[7] It was sold by the King to Baron Erland Broman. The property was located in two blocks; the main stone house with a courtyard in the middle in the block called Aurora, and a stable property in the Triton block.

The included map shows the location of the two properties, including a drawing of the buildings. The contract specifies that the plot on which the stone house stood was 2111.875 Swedish square ells (745 square meters), and the property contained a stables of 742.375 Swedish square ells (262 square meters). The property in the Aurora block was called Piper Palace ("Piperska palatset" in Swedish) but was later renamed Petersen House (Petersenska huset). Figure 7.3 shows the building in 1700.

Not all contracts, however, include drawings or even the size measurements of the plot and house. In the present study, the contracts have been used where important information in the protocols is lacking, e.g. location of the sold estate.

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7   Calculation based on Edvinsson and Söderberg 2011.

Figure 7.2: *A sales contract from 1756.*

Source: Stockholms stadsarkiv.

Block names and numbers

The protocols of real-estate transactions, the uppbudsprotokoll, do not always contain all the relevant information. In particular, the block and/or block number are often missing in the early material. Without that information, it is virtually impossible to identify each building, something that the method we are using to construct the real-estate price index requires. In those cases, the information needs to be sought elsewhere. These complementary sources include contracts, maps, archival registers, street directories, population registers and probate inventories.

Block- and street names as well as plot numbers have changed throughout history in Stockholm. During the Middle Ages, Stockholm's Old Town was divided into four main quarters, called "fjärdingar". Block names for each separate building block started to emerge during the seventeenth century. In 1729 each plot or building in each of the four quarters was given a number and finally in 1810, the system still in place today was implemented and every block received its own series of numbers. Street addresses and numbers for all plots and buildings were introduced in 1832. Using the register, it

Figure 7.3: *Piperska huset, in the Aurora block , around 1700, by Erik Dahlbergh (1625–1703).*

Source: Wikimedia Commons.

is possible to conclude which plot or building was being sold, which parish it belonged to, its block name, the old or new property number and/or the street name. An example of a record in the Estate Register is shown above in Figure 7.1.

The old maps (see examples below) were used to locate the block on which the property was located via the street names or other geographical descriptions in the protocols and sales letters.[8]

Addresses could be located using another register that is available online, the "Kvarters- och adressnyckel 1730–1810".[9] This is an interactive tool set up by the staff at the Stockholm City Archives. Despite this, the match between old and new plot numbers is not perfect, given, for example, that some plots in the new system contained several plots in the old system. We could therefore not compare sales when plot numbers could not be matched.

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8   The Stockholm city archive has collected many useful maps at their web portal Stockholmskällan.

9   Stockholms stadsarkiv. Kvarters- och adressnyckel 1730–1810. https://sok.stadsarkivet.stockholm.se/?template=view_post&id=147 [2020-04-26]

The Estate Register, "Fastighetsregister 1675–1875"[10], was set up by amateur genealogists on typewriter-written cards and at some point handed over to the Stockholm City Archives. The specific date at which the original records were created, and by whom, is unknown. The register was stored for a long time in lockers located in the City Archives' reading room. Now digitalized, all the material stored in the lockers is now available online via the City Archives website. The cards contain information about the owner/s of a specific property, changes in ownership and the property's address (block name, property number and street name). The creator/s of this register used a variety of sources to crosscheck and establish who owned a property, as well as the correct block name and property number. To confirm the information in the transaction protocols, they used different sources such as population registers ("mantalslängder" in Swedish) and probate inventories ("bouppteckningar").

The Swedish state's use of population registers goes back to the 16th century. From 1652, all adult citizens were counted annually and had to pay a specific tax called "mantalspenning". This register excluded some groups (for instance the nobility, military staff and the very poorest people) but included most of the population. Probate inventories have been compulsory by Swedish law since 1734, but this procedure was common even earlier than that, especially in larger towns and cities. The purpose of the probate inventory was to take care of all assets and liabilities in connection with a citizen's death or bankruptcy.

In the late 17th century, Johan Olofsson Holm was appointed City Engineer of Stockholm. Acting on orders from the Riksråd[11] Claes Rålamb he created "Holms tomtbok" (Holm's book of properties) which is a collection of maps depicting Södermalm (the eastern part in 1674[12] and the western part in 1679[13]) and how plots of land were distributed between different owners.

In addition to the sources mentioned above, there are a variety of texts produced in Stockholm in which its citizens were noted and registered. For instance, the very first Swedish street directory over Stockholm, named *Den nu för tiden florerande widtberömde kongliga residence-staden Stockholm* is a collection in which residents, companies, trading companies, associations, establishments and the like in the city are listed. Information about the residents' names, titles, occupations, housing and more is also included. This directory was published in 1728 and can be used to locate a specific person in connection with a specific plot of land or building, however, it does not include all citizens of Stockholm. Only persons that were paying taxes were registered in the directory.

10　Stockholms stadsarkiv. Fastighetsregister 1675–1875. https://sok.stadsarkivet.stockholm. se/?template=view_post&id=153 [2020-04-26]

11　The Riksråd or Council of the Realm was a group of individuals acting as councils to the king or queen who helped rule Sweden from the late Middle Ages until well into the 18th century.

12　Stockholms stadsarkiv. Holms tomtbok, södra förstaden östra 1674. https://sok.stadsarkivet.stockholm.se/bildarkiv/Egenproducerat/atlas/holm/Holms-tomtbok-1674public.pdf [2020-03-12]

13　Stockholms stadsarkiv. Holms tomtbok, södra förstaden västra 1679. https://sok.stadsarkivet.stockholm.se/bildarkiv/egenproducerat/atlas/holm/Holms-tomtbok-1679public.pdf [2020-03-12]

Figure 7.4: *Plan of Stockholm between Norrström and Söderström (i.e. the present Old Town) 1733*

Soruce: Wikimedia Commons (originally from Stockholms stadsarkiv)

Building permits

One of the main problems with most of the methods that can be used to construct a real-estate price index, is that it is often hard to separate price changes from qualitative changes to the housing.

Over the centuries, many houses in Stockholm have been transformed so much that they can barely be said to still be the same structure. New floors might have been added to existing ones, façades might have been changed or, sometimes, the old building has been destroyed and a new building erected in its place. As the block names and numbers have remained the same, even if the house has changed or been replaced with a new one, it is therefore important to try to sort out buildings that have undergone large transformations. To do this, we have studied building permits, in addition to housing transactions.

As early as 1686, there was a regulation stating that all new buildings had to be reported beforehand to the city administration. The regulation was re-enacted in 1708 and it was specified that a construction drawing was to be included. Thanks to this, the Stockholm City Archives have substantial building permit documentation in the form of construction drawings. The series starts in 1713 and ends in 1874.[14] The documentation has been catalogued online by the Archives, and contains – among

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14 Wikström 1969.

other things – the date of the document, the property it concerns, and a photocopy of the drawing. All this information was collected from the internet and compiled in a database. All and all, the database includes 7 915 building permit documents.

The drawings give a detailed picture of what kind of changes were planned. Furthermore, they also include notes from a city architect and approvals of the permit. This means that the archive could in theory be used to analyse renovations in more detail. The time frame of the current project, however, did not allow for that. Our database provides information on which building a permit concerns and when the permit application was submitted.

In Figure 7.5 below, an example of a building permit is given. It's associated metadata includes, in this order, year of the permit (år), date (datum), parish (plats), block (kvarter), street (gata), architect (arkitekt), client (beställare), type of document (typ), quarter number (kvarter ej normerad) and information about paper type.

Figure 7.5: *Example of a construction drawing.*
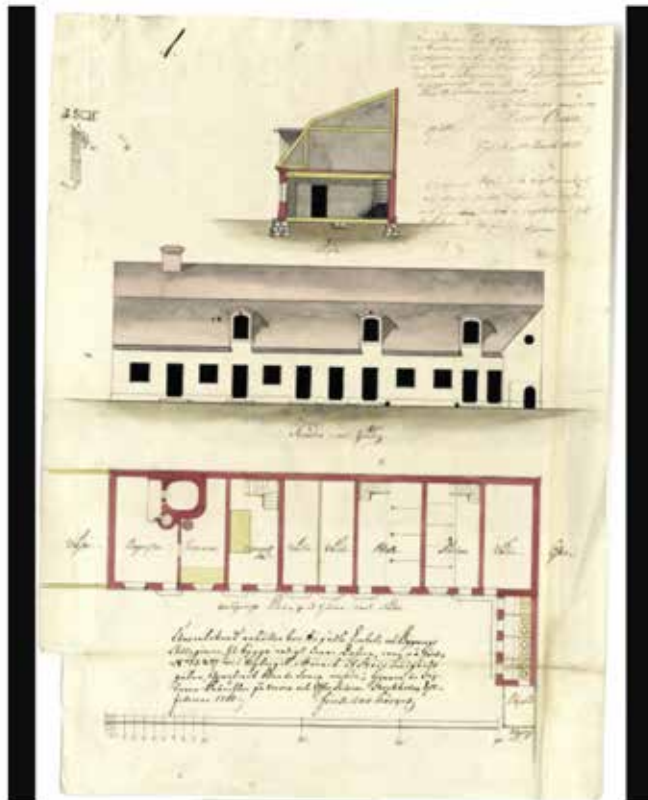
Source: Stockholms stadsarkiv.

3. Method

To construct a historical real-estate price index, researchers usually make use of transactions records, archived by the city. There are then multiple methods available to construct an index from the price information. Simply using yearly averages or median prices fails to account for the qualitative differences in properties sold; like size, building material, condition, etc. The most commonly used are, instead, hedonic regression, sales appraisal ratios and repeated sales regression.

This section starts with a short survey of long-run house price indices. As will be seen, numerous methods are employed. But in the end, they all struggle with the problem of how to take qualitative changes into account. The second part of the section explains the repeated sales method that is used in the present study.

Earlier studies

Hedonic regressions

A number of previous studies that have attempted to construct a long-run real-estate price index have used hedonic methods. The idea is to include relevant indicators of the qualitative characteristics of the properties sold and estimate a regression model.

Raff, Wachter and Yan presents an index for Beijing, 1644–1840. They include information about number of rooms, geographical location, number of court yards, if the house had a well and building material.[15] Karagedikli and Tunçer have constructed a price index for Edirne in the Ottoman Empire, 1720–1814. Their hedonic regression includes numerous variables that detail the the building's quality, the composition of the neighborhood and the geographical location.[16] A paper by Deeter, Duffy and Quinn (2016) tracks housing prices in Dublin, 1708–1949. Their hedonic regression includes information about location, if a garden or garage was included, and the number of properties included in each transaction.[17] Ronan Lyons uses a similar approach, but adds dwelling size, to construct a house price index for Dublin, 1900–2015.[18]

Repeated sales

There are also several studies that have used a repeated sales method. This method uses information about the price changes between sales of individual properties. The advantage of this method is that no additional information about housing quality is needed. One can, however, only use transaction data for houses that have been sold

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15   Raff, Wachter, and Yan 2013.
16   Karagedikli and Tunçer 2021.
17   Deeter, Duffy, and Quinn 2016.
18   Lyons 2015.

more than once. Furthermore, one has to either assume constant quality of the individual houses or in some way control for qualitative changes.

One of the first analysts that employed a repeated sales approach to construct a real-estate price index was Gaston Duon. In an article from 1946, Duon presented a house price index for Paris, 1840–1944. Duon's data are discussed, and linked forward to 2015 by Friggit. Using information from the property register, Duon was able to exclude transactions where the building had undergone transformations. He also tried to estimate the average annual depreciation of a house and take that into account when constructing the index.[19]

In a pioneering study, Eichholtz used repeated sales regression to estimate a real-estate price index for the Herengracht district in Amsterdam. He also controlled for the transformation of houses from residential into commercial buildings.[20] Korevaar has recently used a new database from the Amsterdam City Archive compiled from all documented legal sales in Amsterdam between 1563 and 1811. In total, the database contains 164,067 transactions. It can be compared with the Eichholtz index that used 4 252 observations.[21]

Eitrheim and Erlandsen use a repeated sales method to estimate house price indices between 1819 and 1989 for four Norwegian cities: Oslo, Bergen, Trondheim and Kristiansand. They control for qualitative changes of the houses by excluding all properties for which the plot size has been changed or a new house has been built.[22]

Sales price appraisal ratios

In previous Swedish studies, real-estate indices for Gothenburg have been compiled for the years 1875 to 1957.[23] Indices for Stockholm have been compiled for the periods 1818 to 1875[24] and 1875 to 1957[25]. In all three cases, a sales appraisals ratio method (SPAR) was used.[26] The SPAR method combines sales data with taxation records for each property included in the dataset. The ratio between market price and appraisals is supposed to catch qualitative changes of the properties sold, given that the taxation value increases when new constructions are added to the property.[27]

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19 Friggit 2008.
20 Eichholtz 1997.
21 Korevaar 2021; A discussion about housing quality in the context of historical rents in Amsterdam can be found in Korevaar, Eichholtz, and Lindenthal 2021.
22 Eitrheim and Erlandsen 2005.
23 Bohlin 2014.
24 Edvinsson, Eriksson, and Ingman 2020.
25 Edvinsson, Blöndal, and Söderberg 2014.
26 For comparison, all studies also constructed an index with a repeated sales method.
27 A lengthy discussion about pros and cons of the RS and the SPAR method can be found in Edvinsson, Eriksson, and Ingman 2020.

Other notable studies on long-run real-estate prices are Shiller's index for the US, 1890–2014[28] and Knoll, Schularick and Steger's compilation of house prices for 14 countries, 1870–2012[29]. Both these studies have, however, the problem that they combine indices of different qualities. Especially when it comes to the period before 1953, Shiller's index has been criticized for the use of non-robust methods such as median prices and for including few observations per city and year.[30] Knoll et al. do not work with primary data and the indices they use are of a different quality. Furthermore, they do not separate urban and rural price indices and seldom take qualitative changes into account.[31]

To sum up, all methods try in different ways to control for the problem that houses are a heterogenous commodity, that they are infrequently traded, and that their quality may change significantly between sales. Choice of method largely depends on the data availability.

The present study

If appraisal data had been available for the period of this study, it would have made sense to use the SPAR methodology from previous Stockholm studies. That would have facilitated the comparability and the linking between the series. We, however, lack data that would have made this possible. Instead, the present study employs a *repeated sales method* (RS) in similar fashion to the studies on Amsterdam and Norway discussed above. We will, also, take measures to control for transformations between sales.

The RS method was originally proposed by Bailey, Muth and Nourse in 1963.[32] The basic idea is that if one can assume that investments in a property over time correspond to depreciations, one can estimate the development of real-estate prices from the price differences when the same buildings are sold numerous times.

The repeated sales method is a systematic comparison of prices in multiple sales of a given property. The method regresses the logarithm of the ratio of the price of a given property in the second sale to the price of the property in the first sale, on time dummy variables set to –1 in the year of the first sale, and to 1 in the year of the second sale, and otherwise 0. The regression coefficients of the time dummy variables are estimated for each year by OLS, and a yearly repeated sales index is obtained for the studied period.

One can suspect that the probability of a qualitative change for an individual house increases with time between two sales. If that is the case, the variance of price

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28   Shiller 2006.
29   Knoll, Schularick, and Steger 2017.
30   Lyons 2015, 5.
31   See discussion in Korevaar, Eichholtz, and Lindenthal 2001, 14f.
32   Bailey, Muth, and Nourse 1963.

ratios will increase when the time interval between sales increases. To circumvent that problem, Case and Shiller have developed a modified RS method, often referred to as a *weighted repeated sales method* (WRS).[33] By taking the squared residuals from the initial RS regression, they regress them on an intercept and variable representing the interval time between the sale pairs. In the next step, the fitted values from this regression are used as weights in a weighted least squares regression that, apart from the weights, has the same input as the initial RS regression. The WRS method is applied in the present study.

In comparison to, for instance, annual averages, the RS method does not presuppose homogeneity between properties sold during the same year. It does, however, presuppose homogeneity between individual properties over time. This assumption is often violated. An individual property can change a lot between two sales: it can, for instance, be rebuilt or replaced with a new building.[34]

To control for this, we decided to complement the house transaction database with building permit documentation. For the whole period of this study, building permits were required when rebuilding or building a house. It was not possible to decide which ones of the applications for building permits that were approved or not, i.e. it was not possible to know whether an application was followed by a new construction or not. We therefore excluded all sales pairs in which a building permit was applied for. By doing this, a large proportion of properties that underwent major qualitative changes were removed.

4. Data

The database

Our database includes 22,169 unique transactions of houses in Stockholm between 1726 and 1875. It provides information about the sales price, the name of the property, when the sale was registered, and in what parish the property was located. All properties were located in the inner city of Stockholm: Kungsholmen, Norrmalm, the Old Town, Södermalm and Östermalm.

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33 Case and Shiller 1987.
34 See discussions in Eurostat 2013; Bourassa, Hoesli, and Sun 2006; Englund, Quigley, and Redfearn 1999.

In Figure 7.6 below, the number of registered sales per year is illustrated. Sales are grouped for each year, i.e., the year that the sales contract was signed. On average, the sample consists of 147 transaction per year, with a median of 138 and a standard deviation of 94.6. There are some cyclical movements in the number of transactions per year, and a general increase towards the mid-1850s.

Figure 7.6: *Number of registered housing transactions per year, 1726–1875.*
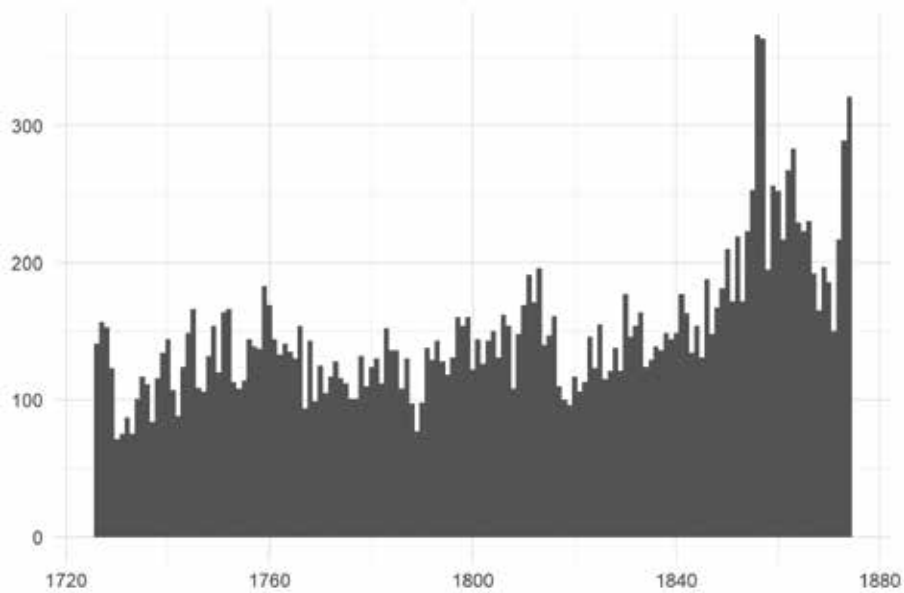
The geographical distribution of sold properties is relatively constant over the period 1726–1875. As can be seen in Figure 7.7 below, about half of the transactions took place north of, and about one third south of the Old Town. For all years, there is a fairly equal number of transactions in northern and southern Stockholm, respectively. The number of transactions in the Old Town is lower. This probably reflects a much lower number of existing houses and limited possibilities to expand the city on the Old Town island.

The lower part of Figure 7.7 shows the geographical distribution in northern and southern Stockholm, based on parishes. It shows that the distribution of number of sales between parishes was quite stable over the investigated period.

**Figure 7.7:** *Proportional geographical distribution of registered transactions.*
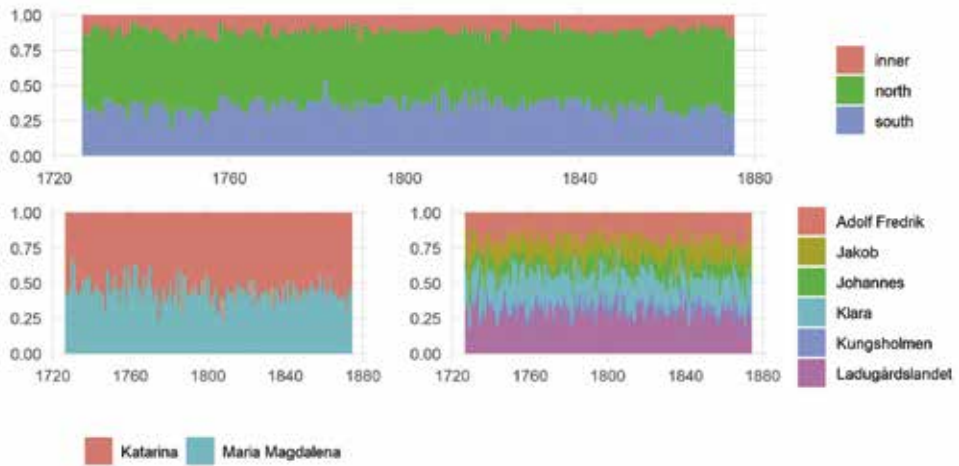
Difference between registration and sales date

Our data provides information about both the date of sale (the time when the transaction was agreed upon) and registration date (the time that the City registered the sale). Normally, a sale was reported within 100 days after the transaction was agreed upon. There are, however, several cases where the difference is much larger. The largest in our sample was the sale of the property Skravelberget större 1, located in north eastern Stockholm in the parish of Ladugårdslandet. The sales contract was signed on 4 August 1733, but the sale was registered on 7 November 1774, more than 41 years later. This phenomenon continues well into the 19th century. For instance, the property Barnhusväderkvarnen 11, 12, located in the Adolf Fredrik parish in Norrmalm, was sold on 17 November 1812, but the sale was registered on 12 December 1831.

In most cases, the sale of a property was registered the same year. An exception is when the registration is done during the first quarter of each year. These registrations often represented transactions carried out in the year before. The median difference between the year of registration and the year of sale for all years in our database is 0. The mean and the standard deviation, however, tended both to increase over the period. These trends are illustrated in Figure 7.8.

Figure 7.8: *Mean (line) and standard deviation (shaded area) in difference between registration and sales year, 1726–1875.*
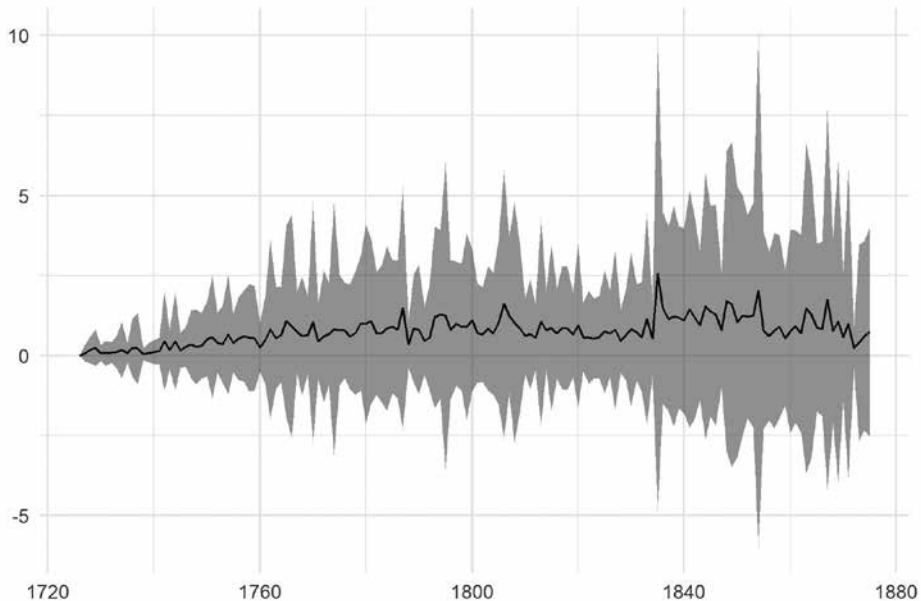
This shows that when constructing an annual index, it is important to group the data after sales year, not registration year. Otherwise, the result can be misleading.

Currencies in use

The currencies system changed substantially during the studied period. This is expressed in the type of prices paid for various properties. Up to the first half of the 19th century, there were parallel currencies in circulation.[35] We therefore needed to convert all registered prices into one and the same unit.[36]

Many payments were made in multiple currencies. Some transactions were also made in silver, expressed in weight, others in gold. In practice, during most of the period, only one currency dominated the transactions. However, this was not necessarily the weakest currency in circulation, given that it was important that the money paid according to a contract did not lose its value. It is likely that the composition of the currencies used in the purchases of properties may have been different from the composition for other trade transactions.

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35 For a history of the Swedish monetary standards, see Edvinsson 2010.
36 This could be done with the online price converter 'Prisomräknare från medeltiden till 2100' at www.historia.se. It builds on the work of Söderberg and Edvinsson 2010.

Before 1624, Sweden had a silver standard. The main currency unit in Sweden was the mark, which was divisible into eight öre. Four marks were also denominated as daler. Both the mark and the öre were minted as silver coins, while the daler was a unit of account. Parallel to the mark, Sweden also minted riksdaler coins, which were international. The value of the riksdaler fluctuated relative to the mark.

Up to 1776, different currencies were in circulation, based on silver, copper and gold coins, but later also on fiat money. Despite this, the most common unit in the transaction of properties was the daler kopparmynt. Payments recorded in daler silvermynt and riksdaler were rare, which was quite a different situation from 1670. In addition, it was also common to make payment in actual silver, measured in the weight unit of lod. For example, in 1740, all 170 payments were recorded in daler kopparmynt. In only two of the transactions were additional payments made in silver, and in one transaction additional payment was made in gold rings, each set equal to one ducat. The main change compared to the 17th century was the widespread use of paper notes, especially for larger transactions, and the unit of daler kopparmynt followed the value of notes after convertibility to copper coins was abolished in the mid-1740s.

In 1777, the silver standard was reintroduced, and the copper standard abolished. The main currency unit came to be the riksdaler, which previously had functioned as an international hard currency. The riksdaler was set equal to 6 daler silvermynt or 18 daler kopparmynt. The gold ducat, however, continued to be minted, and used in some transactions, although its share in the money supply was very small. The switch in the currency unit is evident in the data on property sales. While daler kopparmynt were used in almost all sales up to the end of December 1776, from January 1777 almost all sales were recorded in riksdaler.

The monetary stability did not last long. When the Riksbank refused to lend money to King Gustav III, he established Riksgäldskontoret in 1789, which issued notes that soon replaced the Riksbank notes as the main means of payment. The value of the riksgälds notes fell in value relative the banco notes, although the exchange rate between the two fluctuated. One riksdaler banco continued to be convertible on request for one riksdaler specie, i.e. one riksdaler as an actual silver coin. The monetary disarray is evident in the transactions in the property market.

Up to November 1790, all payments seems to have been made in riksdaler banco. The first payment in riksdaler riksgälds is recorded for December 1790. During the rest of the 1790s, many payments were made both in riksdaler banco and riksdaler riksgälds, and some payments also included silver and gold ducats. Unfortunately, for some of the transactions, it is not completely clear which currency unit was used. Sometimes the payment was denominated just in riksdaler, and in periods where riksdaler riksgälds were mostly used, we have assumed that this was the unit. It was not until August 1803 that 1 riksdaler banco was fixed to 1.5 riksdaler riksgälds. Afterwards, most transactions were denominated in riksdaler banco. The riksdaler riksgälds and riksdaler banco continued to be used as units of account, although

both referred to the same underlying currency. In 1855 riksdaler riksmynt replaced the other units.

In 1809, due to the over-issuance of banco notes to finance the war against Russia, convertibility of the riksdaler banco into riksdaler specie was suspended. The riksdaler banco, and in consequence also riksdaler riksgälds, fell in value relative to actual silver riksdaler coins, which were termed riksdaler specie. Payments for properties continued to be almost exclusively made in riksdaler banco, and only on a few occasions were they made in riksdaler specie.

The repeated sales dataset

From our database, 14,706 transaction pairs could be created. The original dataset consists of 6,854 unique property names. 4,419 of them appear more than once and can therefore be used in the repeated sales dataset. In total, 2,435 property names only appear once and those transactions are therefore excluded. The data loss amounts to around 11 percent of the database. In Figure 7.9 below, the proportion of excluded transactions per year is depicted. The figure shows that the share of excluded transactions rarely exceeds 20 percent.

Figure 7.9: *Annual proportion of housing transactions that could not be used, 1726–1875.*
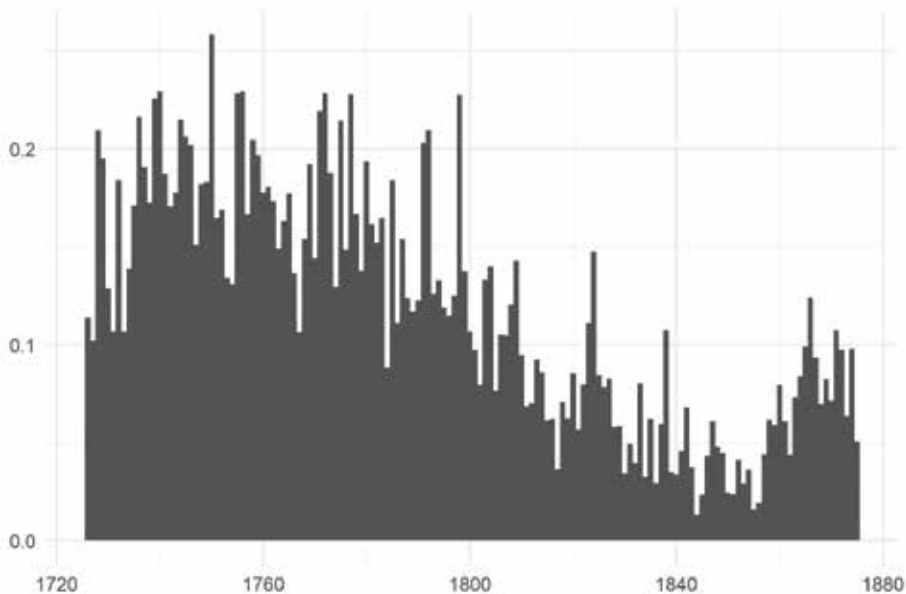
As has been discussed earlier, we wish to exclude houses that underwent large renovations or that were rebuilt between two sales. We therefore excluded all observations for which a building permit existed from a date in between the sales.

This procedure led us to exclude 3,022 observations, leaving the repeated sales sample with, in total, 11,684 pairs. The number of registered building permits per year and the number of transaction pairs excluded are depicted in Figure 7.10. Evident from the graphs is that the number of building permits increased rapidly towards the end of the 19th century. This, of course, coincided with a growing population. One can also see that this is reflected in the number of transaction pairs excluded. It becomes increasingly more common at the end of the time period.

Figure 7.10: *Number of building permits per year and number of transactions excluded due to building permit per year.*
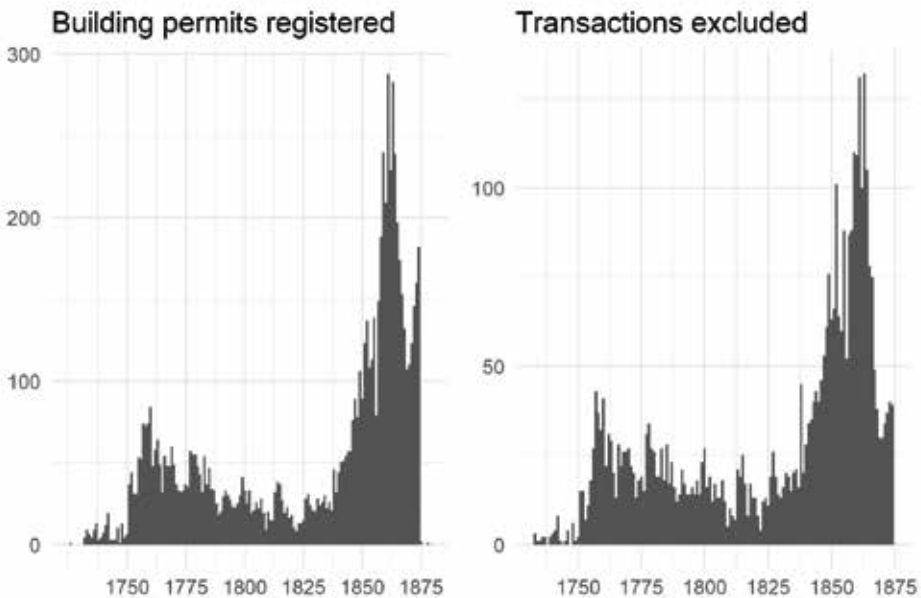
On average, there were 79.4 observations per year at time 0, and 77.9 observations at time 1. Time 0 is the first registered sale for each pair, time 1 is the second. The number of observations for each year is depicted in Figure 7.11.

Figure 7.11: *Number of transaction pairs per year of first (time0) and second (time1) trans-action.*
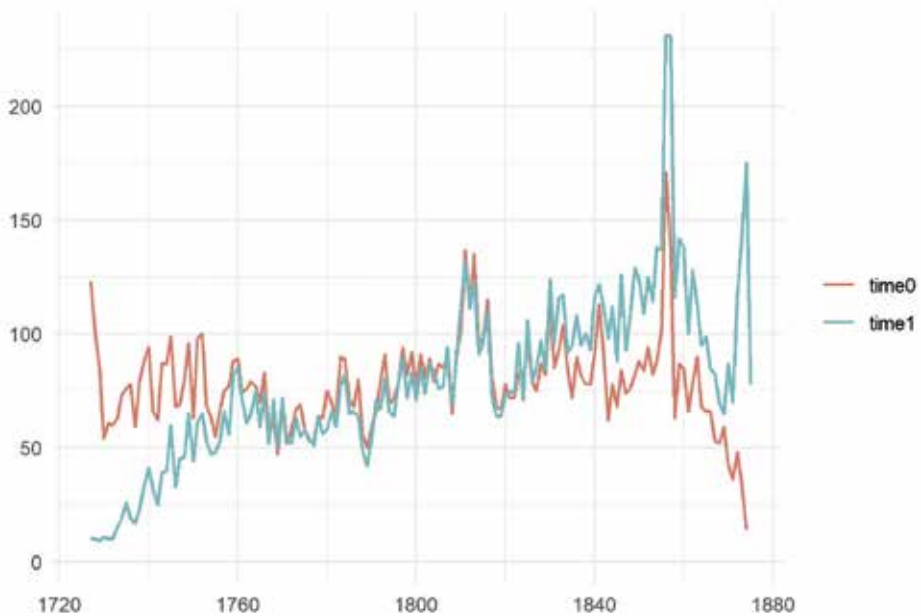
Buyers, sellers and items sold

The "uppbuds"-protocols, which we use as our source material, contain some information that has not been analyzed in a systematic way for this study. This includes information on the type of property, if the land was included and name, gender and professional title of both seller and buyer. This information is not necessary for the construction of a housing-price index, but it might provide a deeper understanding of the historical housing market of Stockholm and therefore deserves a short comment here. Restrictions on who could participate as agents on the market could also increase transaction costs, and therefore indirectly impact price formation.

What kinds of property were sold?

The "uppbuds"-protocols provide information about the type of property. The praxis for registering these sales, however, changed over the period investigated. During the 18th century, it was normally noted if a house sold was a stone house, a half-timbered house or a wooden house. In the densely populated inner city, today's Old Town, almost all houses were made of stone. Wooden houses were common in the outskirts of the city. Stone houses were normally the most expensive house type.

In addition to houses, plots of land and gardens, sometimes a house plus a garden,

were also sold frequently. Occasionally, shops and sheds, mills and even graves were sold. Our dataset, however, only includes houses.

Sometimes, the housing transactions in Stockholm did not include the land that the house stood on. Many houses stood on, so called, "unfree ground" meaning that the city, and not the house owner, owned the land. Owners of properties on unfree ground had to pay an annual fee, so called "tomtören". When such a property was sold, 1/30 of the contract price was paid as a fee to the city.[37]

Who were the sellers and buyers?

There is a perception among earlier generations of Swedish historians and economic historians that during the 18th century, women mainly took part in business, the housing market, and other public affairs as widows. The formal institutions of the time, such as legal texts, support this perception as women's participation was heavily regulated. Young unmarried women were to be represented in legal matters by their fathers, another male relative or a male appointed as legal guardian, while wives were to be represented by their husbands. According to the law, it was only when the husband was away for a long period of time and when a woman became a widow that she was free to act on her own in business and legal matters.

However, just as in many other historical contexts, formal institutions seldom depict the whole truth. Maria Ågren argues that "the labouring couple" was a central cultural notion among common people, that very large group in society who did not get a chance to make an impression on the law.[38] In other words, according to the perception of a large majority of Swedish citizens at that time, women were equally responsible for any and all kinds of family business, trade and property ownership. In relation to this perceived reality, individuals within a society shape, and organize their everyday life by informal institutions rather than only looking to formal ones for guidance.

There is now an increasing amount of research indicating that women – many widows, but also wives and sometime even unmarried women, participated in commercial trade, in the sphere of artisan work as well as in the housing market fairly consistently during the 18th century. After a new law of 1734, which officially prohibited women's independent business and trade in Sweden (widows excluded), there was a decline in participation. But women never completely stopped participating as independent agents in the real-estate market and their participation is continuous throughout the investigated period.

When looking at the data collected from primary sources, women mainly appear as co-sellers with their husbands, almost all the "uppbud"-protocol notes include a reference to a woman. When a married couple sold a property they were, in both the "uppbud"-protocols and the "fastebrev", most commonly registered as the husband's work title and name followed by a reference to his wife, for example "åkaren Erich

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37 Wikström 1969.
38 Ågren 2009.

Hallberg och dess hustru Magdalena Hallberg"/ " Haulier Erich Hallberg and his wife Magdalena Hallberg". In many of these cases, when looking at consecutive sales of a specific plot or building, it is clear that the property came into the household via the wife's inheritance and when it is later sold, that same wife is only mentioned as the spouse of her husband. And, following that, when the couple bought a new property; the husband is the sole buyer.

Even though most of the women mentioned in the primary sources were registered as co-sellers along with their husbands, there are many examples of women selling and buying property with no husband or other male guardian involved.

There are also examples of women acting independently in the Stockholm housing-market on a larger scale during the 18th century. For instance, there was a widowed woman named Anna Bergklyft who, after her husband died in 1740, bought at least 15 properties over a 40-year long period. She bought (and sometimes sold) plots of land, buildings, and parts of buildings within a geographical area covering around eight blocks located between Adolf Fredrik Church and the Stockholm Observatory on Norrmalm in Stockholm, part of the area which is today known as Vasastan. Her belated husband, Anders Bergklyft, was a small shop-owner ("hökare") and has not been found to own more than his and his family's home. After he died, Anna seems to have started some kind of real-estate business.

People involved in property transactions normally came from the richer strata of Stockholm's population. The largest group is craftsmen, normally masters. In those cases, it is probable that the bought houses were used both as workshop and dwelling. Common examples of that group are shoemakers, brewers, and carpenters. Others were small shop-owners, wholesale merchants and seamen. The most expensive transactions, naturally, involved the very richest in society. Merchants, factory owners and the upper class with high-ranking positions in the state administration or the military.

The price differences were often large. Let us exemplify with a comparison between the most expensive and the least expensive property sold in 1794. The most expensive transaction included the nobleman and governor Robert Wilhelm de Geer as the buyer. He bought two stone houses on the island of *Blasieholmen* on the street *Arsenalgatan.* They cost in total 16 500 riksdaler riksgälds. The sellers were the heirs of Countess Ulrica Eleonora von Düring. The least expensive property – a wooden house – was located in the south of the city, in the alley *Lilla fiskargränd*, and was bought by the soldier Nyström. The house was sold by Maria Hackman, a widow of the district court judge (Swedish: rådman), for a price of 56 riksdaler riksgälds. The first transaction was equal to the pay for 74,250 days of work by unskilled labour in Stockholm, and the second only 252 days of work.[39]

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39 Söderberg and Edvinsson 2010, 474.

The housing price index for Stockholm 1726–1875

Figure 7.12 depicts the evolution of real-estate prices in Stockholm between 1726 and 1875 in logarithmic values. The upper series shows nominal values, the bottom series is the nominal series deflated with the Swedish consumer price index. Figure 7.13 shows the same series in logarithmic values. The base year is here set to 1726, in contrast to the appendix table where it is set to 1730.

Stockholm is here restricted to today's inner city, that is: the Old Town, Söder-malm, Norrmalm, Kungsholmen and Östermalm. During this period, most people lived around what is today known as the Old Town (the parish of Nikolai). This can be seen in Peter Tillaeus map, reproduced in Figure 7.17 below.

As can be seen in the graphs, the nominal prices increased with nearly 7,900 per-cent (from 100 to 8,000) over the whole period. For real values, the corresponding increase was around 350 percent (from 100 to 450). If we, however, focus on real prices, the increase is not linear and two main trends can be noticed. First, between year 1726 and 1809, housing prices are more or less stagnant in the long run. After 1810, a period of rising prices begins.

Figure 7.12: *Real-estate prices in Stockholm, 1726–1875. 1726 = 100.*
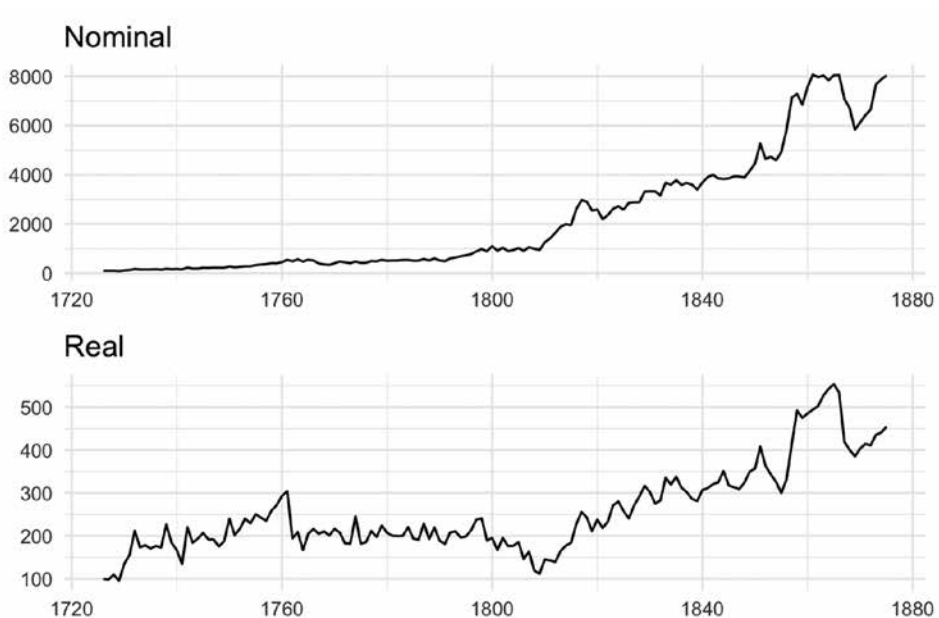
Figure 7.13: *Real-estate prices in Stockholm in logarithmic scale, 1726–1875. 1726 = 100.*
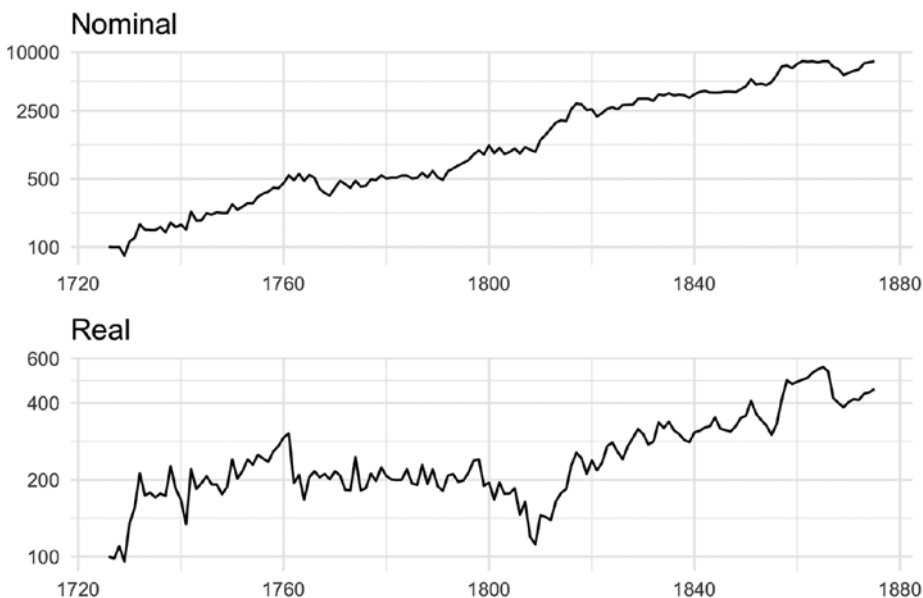
Source: Present study, Söderberg and Edvinsson (2010) and. Our calculations.

The average growth rate was 3.6 percent in nominal prices, and 1.9 percent in real prices between 1726 and 1875. For the same time period, the compound annual growth rate was 3.0 percent for nominal prices and 1.0 percent for real prices.

Regional differences in real-estate prices, 1726–1875

We can compare regional differences in real-estate prices by subdividing our original dataset with repeated transactions into the three main districts of the city: the inner city (today's Old Town), the city north of the Old Town and the city south of the Old Town. Figure 7.14 shows the five years moving average of the three repeated sales indices in natural logarithms. As can be seen, the inner city (the Old Town) has a significantly slower price development over the period. The up- and down cycles, however, seem to be closely correlated among all three indices.

The different price developments might be explained by the growth of the city. As the population soared, one can expect rising land prices in what were the outer parts under development. Better infrastructure might also have added to this. The differences might also reflect larger qualitative improvements of the housing stock in the outer parts of the city, especially as wooden houses were replaced with stone houses.

Those changes should, however, be accounted for by our use of building permits to exclude properties that underwent large changes between sales.

Figure 7.14: *Regional real-estate price indices, nominal values and five years moving average, 1726–1875. 1726 = 100.*
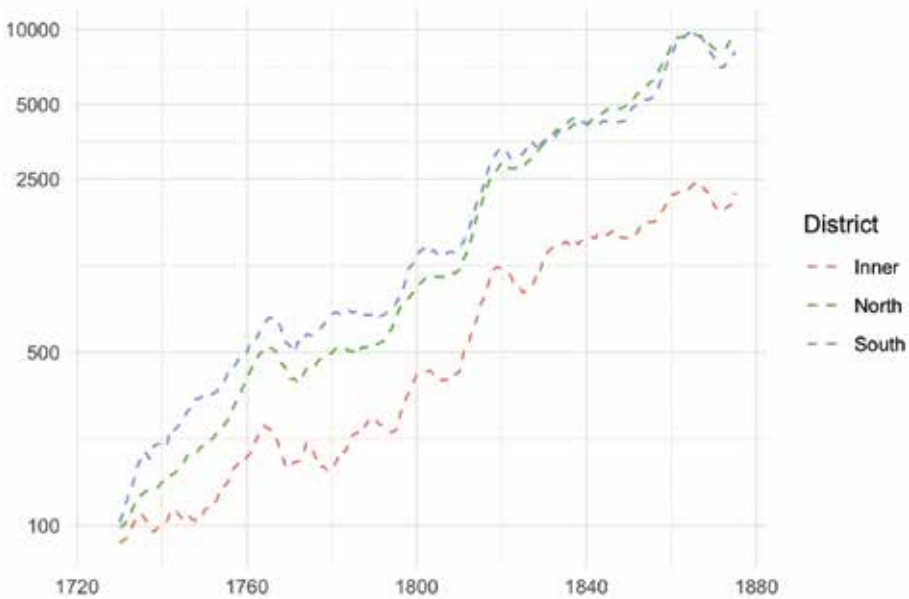
Comparison of methods for constructing housing price indices

The present index partly covers time periods that have already been investigated. Edvinsson, Eriksson and Ingman[40] have presented a real-estate price index for Stockholm from 1817 to 1875. That index was based on transaction data between the (slightly longer) period 1804 and 1875 and the data was processed using two different methods: weighted repeated sales (the method that is used in the present study) and a sales price appraisals ratio (a ratio between transaction price and taxation value).

In Figure 7.15 below, the previously constructed indices are depicted together with the index of this study. Let us look at the period 1726–1875 first. As can be seen, estimated trend, fluctuations and overall growth are all very similar in all three cases. The index of the present study shows a slower price increase towards the end of the period. That probably reflects that we have accounted for the rising number of building permits.

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40 Edvinsson, Eriksson, and Ingman 2020.

Figure 7.15: *Comparison of real-estate price indices, nominal values, 1804–1875. 1804 = 100.*
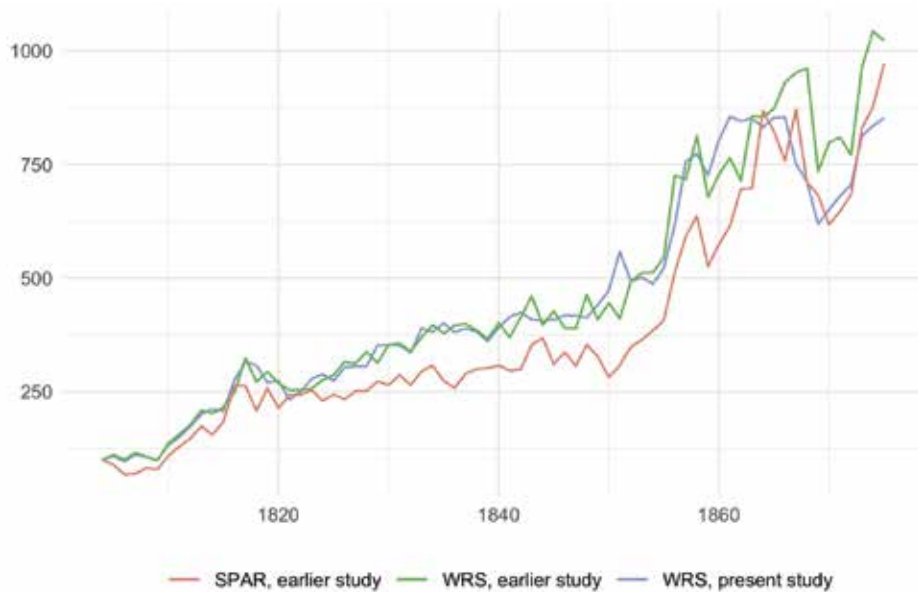
Historical context 1726–1875

The stagnant real-estate prices coincide with a period of more general economic stagnation in Stockholm. As discussed in the previous chapter, Stockholm changed dramatically between 1600 and 1690, which led to increasing property prices. The city became Sweden's administrative centre and expanded rapidly in terms of population and economic importance. Military defeats drained the state resources, and a plague caused the death of approximately 20,000 inhabitants, amounting to 35–40 percent of the total city population. As shown in the previous chapter, prices collapsed in the early 18th century, but rebounded in the 1720s. The downward trend in population was followed by a recovery in 1720–1750, after which Stockholm entered a stagnation phase where its role relative to smaller cities weakened.[41] Other change that had a negative impact on Stockholm's economy was the rearrangement of the military fleet, which moved from Stockholm to Karlskrona during the 1680s.[42]

The stagnation continued in 1750–1850. Johan Söderberg has identified five separate aspects of Stockholm's growth problems during this period:

1. The growth was not only low from a European perspective, but also relative to other Swedish towns.

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41 Lilja 1992, 116f; ibid., 32.
42 Lilja 1992, 32.

2. The decline of capital was most severe in the textile industry. Only a few small trades grew during this period, for instance tobacco and sugar. Interregional competition emerged for instance in the shipping industry and glass manufacturing.

3. In trade, Stockholm declined in relative but not in absolute terms.

4. No expansion of handicrafts can be observed.

5. There was a secular decline in real wages for unskilled workers from 1750–1800 and they fluctuated substantially in 1800–1850. This pattern was shared with large parts of Europe and the rest of Sweden.[43]

From 1726 to 1800, the population of Stockholm increased by around 50 percent, from 49,700 inhabitants in 1725 to 75,800 in 1800. The increase, however, mainly took place between 1745 and 1757. Figure 7.16 depicts the population of Stockholm between 1725 and 1875.[44]

The outer parts of today's inner city were to a large extent undeveloped. This can be seen in Petrus Tillaeus map over Stockholm from 1733 (reproduced below).

The real-estate price volatility during this period can to a large extent be explained by changes in the consumer price index. Many of the largest price drops, like the one 1738–1741, are not clearly visible if we look at the nominal price index.

There is particularly one price that stands out in the nominal index during this period: between 1765 and 1769, nominal prices fell with 40 percent. In real terms, the fall had already started in 1761 and bottomed out in 1764. The price fall coincided with a deflationary crisis in Sweden in 1767–1769. The crisis was preceded by monetary instability and was eventually triggered by an attempt by the ruling political majority to push down the Swedish exchange rate. Their plan backfired when the intervention became publicly known, and people started to hoard notes and postpone payments. Earlier research has noted that urban real-estate markets were negatively affected by the crisis. The falling property prices had a severe effect on the finances of people who had large mortgages. The lower housing prices led to a rising number of compulsory auctions, as mortgage holders could not make their loan repayments and were forced to sell their properties.[45]

Stockholm's population started to grow at a faster pace in the 19th century. This is remarkable given that the city's death rate actually exceeded its birth rate. Stockholm was therefore dependent on migration for growth.[46]

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43   Söderberg, Jonsson, and Persson 1991, 12f; The decline of textile production in Stockholm has been investigated by many researchers, see for instance Schön 1979; Nyberg 1999.
44   Stockholms utredningskontor 2005.
45   Montgomery 1920, 65; Wetterberg 2009, 93ff.
46   Råberg 1976.

Figure 7.16: *Population of Stockholm, 1725–1875.*

Figure 7.17: *Swedish name: General Charta öfwer Stockholm med Malmarne Åhr 1733. Med Kongl: Maij:ts alldranådigste Privillegio Upsatt af Petrus Tillaeus Stads Ingenieur.*
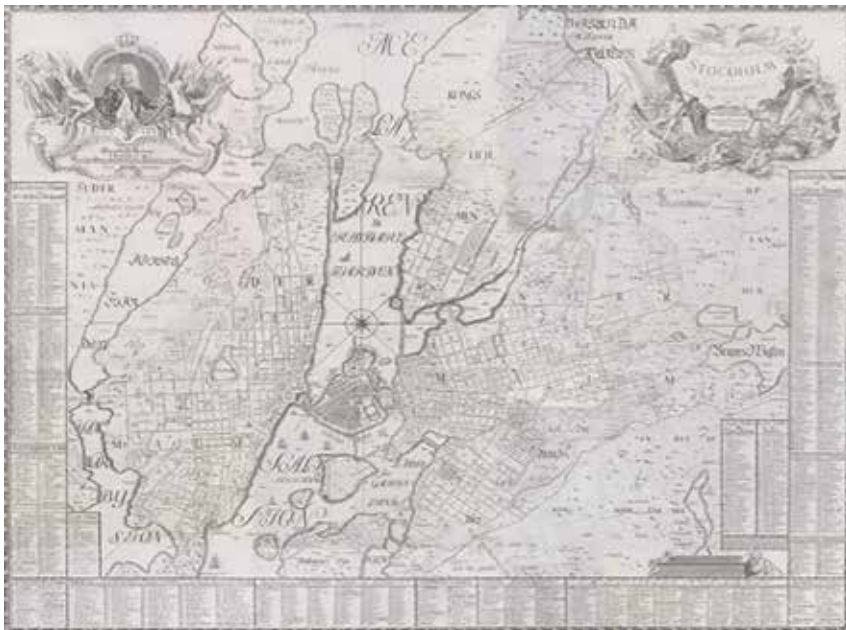
During the 19th century, especially one price fall stands out as especially severe both in nominal and real prices. Between 1866 and 1869, nominal prices fell by around 28 percent and by 30 percent in real prices. This coincided with repeated harvest failures that caused a famine in Sweden.[47]

Our period of study comes to an end right in the middle of some of the most dramatic changes in the history of Stockholm. Towards the middle of the 1800s, the economic growth of Stockholm begun to pick up pace. The city's institutions were modernized. Among other things, the guild system was abolished in 1846 and a freedom of trade reform was launched in 1864. Sweden begun its industrialization in the mid-1800s[48], and Stockholm once again played a major role in the Swedish economy.[49] The city population grew by more than 50 percent 1850 to 1875, from 93,000 to 145,000 registered inhabitants. By 1900, the population had surpassed 300,000.

47 Edvinsson, Eriksson, and Ingman 2020.
48 Jörberg 1991; Schön 1997.
49 Ahlberg 1958; Cederqvist 1980; Gustafson 1976.

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Appendix A

Table A7.1. *The estimated index for properties in Stockholm 1726–1875, (1730 = 100)*

Year	Nominal index				Nominal index deflated by CPI				CPI
	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	
1726	88	92	87	90	74	77	73	76	119
1727	88	94	88	94	73	78	73	78	120
1728	88	92	88	92	81	85	81	85	108
1729	72	78	72	78	71	77	71	77	101
1730	100	100	100	100	100	100	100	100	100
1731	109	115	110	115	115	121	115	121	95
1732	150	150	150	150	157	157	157	157	96
1733	132	135	133	135	129	131	129	131	103
1734	131	135	132	135	132	136	132	136	99
1735	131	140	131	140	126	135	127	136	103
1736	141	147	141	148	131	137	131	137	108
1737	124	131	125	132	128	135	128	136	97
1738	156	163	157	164	168	175	168	176	93
1739	140	148	141	148	137	144	137	144	103
1740	149	155	150	156	124	129	124	130	121
1741	133	133	134	134	100	99	100	100	134
1742	203	209	204	211	163	168	164	170	124
1743	164	174	165	175	137	144	137	146	120
1744	165	178	166	180	144	155	145	157	115
1745	195	199	196	202	153	157	154	159	127
1746	189	197	190	199	142	148	144	150	133
1747	200	199	202	202	142	142	143	144	141
1748	196	210	198	213	130	139	131	141	151
1749	196	203	198	206	139	144	141	146	141
1750	240	243	243	247	178	180	180	183	135
1751	213	225	215	228	150	158	151	161	142
1752	228	241	231	245	161	170	162	173	142
1753	247	256	250	260	178	185	180	188	139
1754	247	258	250	263	170	178	172	181	145
1755	288	300	292	305	186	193	188	197	155
1756	310	323	314	329	180	187	182	191	172

Year	Nominal index				Nominal index deflated by CPI				CPI
	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	
1757	324	337	329	344	174	181	177	185	186
1758	358	363	362	370	192	194	194	198	186
1759	354	368	359	376	201	209	204	214	176
1760	398	419	404	429	217	229	220	234	183
1761	479	480	486	491	226	226	229	231	213
1762	426	443	432	453	144	150	146	153	296
1763	497	509	505	522	155	159	157	163	321
1764	420	429	427	440	124	127	126	130	339
1765	482	504	490	517	152	159	154	163	318
1766	452	461	459	472	160	163	163	168	282
1767	348	367	354	377	152	160	154	164	229
1768	315	324	320	332	156	161	159	165	201
1769	297	306	301	314	149	154	151	158	199
1770	356	375	362	385	160	169	163	174	222
1771	420	431	428	444	154	158	157	163	273
1772	388	404	394	415	135	141	138	145	287
1773	356	375	363	386	135	142	138	146	264
1774	423	434	430	445	182	187	185	192	232
1775	367	377	373	388	135	138	137	142	272
1776	374	386	381	398	138	142	140	146	272
1777	435	430	443	444	157	155	160	160	277
1778	428	450	437	464	147	154	149	159	292
1779	478	497	488	513	166	173	169	178	288
1780	445	457	454	471	153	158	156	162	290
1781	454	471	464	486	149	154	152	159	305
1782	454	463	464	478	148	151	151	156	306
1783	475	496	485	513	148	155	151	160	320
1784	475	487	485	503	163	167	167	173	291
1785	446	465	456	481	143	150	147	155	311
1786	452	474	462	491	142	149	145	154	318
1787	510	530	520	548	170	177	173	182	300
1788	453	469	463	485	143	148	146	153	318
1789	532	542	543	560	163	166	166	172	327
1790	456	462	466	478	140	142	143	147	326
1791	431	445	441	461	134	139	137	144	321

Year	Nominal index				Nominal index deflated by CPI				CPI
	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	
1792	528	534	541	555	154	156	158	162	342
1793	564	580	578	603	156	161	160	167	361
1794	604	620	619	645	146	150	149	155	415
1795	642	674	658	701	147	155	151	161	436
1796	686	699	702	726	158	161	162	168	433
1797	787	816	806	847	177	183	181	190	446
1798	862	869	884	904	178	180	183	187	483
1799	787	812	807	846	141	145	144	151	560
1800	969	980	994	1020	144	146	148	152	671
1801	807	821	829	857	124	126	127	131	652
1802	917	944	942	984	145	149	149	155	633
1803	795	822	817	857	131	135	134	141	608
1804	831	865	855	905	131	136	135	143	634
1805	901	918	926	959	137	140	141	146	656
1806	802	825	825	861	108	111	111	116	742
1807	932	944	959	988	121	123	125	129	768
1808	878	911	903	954	88	92	91	96	992
1809	834	867	858	907	83	86	85	90	1007
1810	1103	1131	1138	1187	108	110	111	116	1026
1811	1248	1265	1286	1327	106	107	109	113	1177
1812	1442	1470	1486	1541	103	105	106	110	1398
1813	1665	1705	1717	1789	122	125	126	131	1366
1814	1759	1808	1814	1900	132	135	136	142	1337
1815	1727	1843	1782	1939	136	146	141	153	1265
1816	2295	2304	2370	2426	169	169	174	178	1360
1817	2618	2613	2703	2750	189	189	196	199	1382
1818	2563	2624	2643	2757	180	184	186	194	1423
1819	2244	2298	2316	2417	156	160	161	168	1436
1820	2280	2302	2354	2424	177	178	182	188	1290
1821	1932	1999	1998	2109	162	167	167	177	1195
1822	2082	2161	2151	2276	173	180	179	189	1203
1823	2310	2325	2387	2450	201	202	208	213	1148
1824	2396	2414	2479	2548	208	209	215	221	1154
1825	2274	2329	2354	2461	191	196	198	207	1190
1826	2522	2602	2608	2745	178	184	185	194	1413

Year	Nominal index				Nominal index deflated by CPI				CPI
	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	
1827	2543	2582	2634	2731	201	204	208	216	1265
1828	2545	2625	2636	2775	217	223	224	236	1176
1829	2925	2931	3033	3106	235	235	243	249	1246
1830	2933	2966	3041	3143	224	227	232	240	1308
1831	2929	2946	3038	3123	204	205	212	218	1435
1832	2793	2868	2899	3044	210	215	218	228	1333
1833	3242	3319	3365	3522	249	255	258	270	1303
1834	3172	3249	3294	3451	237	243	246	258	1339
1835	3333	3355	3463	3567	251	252	260	268	1330
1836	3165	3228	3289	3432	232	236	241	251	1366
1837	3235	3255	3363	3461	224	225	233	240	1444
1838	3172	3380	3301	3601	212	226	221	241	1494
1839	2999	3122	3121	3325	209	217	217	231	1438
1840	3253	3276	3385	3490	228	229	237	244	1428
1841	3447	3477	3589	3709	231	233	240	248	1494
1842	3527	3552	3674	3793	238	239	248	256	1484
1843	3398	3469	3549	3716	241	246	251	263	1413
1844	3379	3460	3528	3704	260	267	272	285	1298
1845	3397	3462	3542	3701	235	240	246	257	1442
1846	3473	3572	3627	3828	232	239	243	256	1495
1847	3468	3520	3623	3775	229	233	240	250	1513
1848	3430	3471	3582	3721	240	243	251	261	1426
1849	3668	3756	3836	4033	259	266	271	285	1414
1850	3929	3967	4107	4258	265	267	277	287	1485
1851	4642	4581	4853	4921	302	298	316	321	1535
1852	4094	4174	4283	4485	269	274	282	295	1521
1853	4171	4203	4367	4523	254	256	266	276	1640
1854	4045	4110	4238	4428	242	246	253	265	1674
1855	4341	4307	4543	4636	222	221	233	238	1952
1856	5137	5107	5385	5510	246	244	258	264	2089
1857	6294	6183	6609	6690	308	302	323	327	2044
1858	6424	6491	6753	7034	365	369	384	400	1761
1859	6037	6003	6347	6511	352	350	370	380	1714
1860	6674	6679	7012	7238	360	360	378	390	1855
1861	7114	6934	7486	7537	367	357	386	388	1941

Year	Nominal index				Nominal index deflated by CPI				CPI
	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	Weighted repeated sales with constant	Unweighted repeated sales with constant	Weighted repeated sales with no constant	Unweighted repeated sales with no constant	
1862	7024	7121	7400	7749	372	378	392	411	1886
1863	7082	6892	7442	7483	391	380	411	413	1812
1864	6912	6945	7269	7550	402	404	423	439	1718
1865	7092	7036	7475	7672	411	407	433	444	1728
1866	7098	6832	7475	7445	396	381	417	415	1793
1867	6245	6354	6588	6941	311	316	328	345	2009
1868	5916	5937	6244	6489	297	298	313	326	1992
1869	5142	5163	5431	5648	286	287	302	314	1800
1870	5404	5181	5721	5690	299	287	317	315	1806
1871	5660	5698	6007	6275	307	309	326	341	1842
1872	5863	5909	6227	6516	305	307	324	339	1923
1873	6762	6706	7199	7427	323	320	344	355	2094
1874	6941	6978	7398	7754	327	328	348	365	2125
1875	7083	7265	7577	8113	337	345	360	386	2103

Note: The nominal index follows the mark kopparmynt 1624–1776, riksdaler specie 1776–1789, riksdaler riksgälds 1789–1855, riksdaler riksmynt 1855–1873 and SEK 1873–1875 (Edvinsson, 2010).