



Questions and answers about the Swiss property price index

1. How did this project start? Who commissioned the FSO to produce an official property price index?

The [parliamentary motion 11.3021](#) (statistical survey of property prices of March 2011) was the project's starting point, followed by the [postulate 12.3003](#), Feasibility study of the statistical survey of property prices). A feasibility study on the introduction of an official property price index was then conducted, commissioned by the FSO ([ARGE-EPFL, Econability und HEG 2012](#)). Finally, on the request of the Federal Council ([Decision of the Federal Council "Creation and introduction of a property price index"](#) of 7 November 2012) a project was set up to develop an official Swiss property price index.

The real estate sector in Switzerland is an important part of the economy. Until now there has been no official property price index. Politicians and the main users of such an index felt that this gap needed to be filled and that the FSO should produce a new set of price statistics to complete the other price statistics already produced ([see website](#)). It is worth pointing out that Switzerland is the last country in Europe to produce an official property price index. All the other European countries have been publishing such an indicator for several years now.

2. This project started in 2015 and was completed at the end of 2020. Why did it take so long?

It took two years' work to define the methodology and to establish the concept of this new indicator: what were the potential sources of data, which quality adjustment methods were possible, which calculation methods could be used, how often should this new indicator be published and in how much detail, etc.

Once the outline of the new statistics had been defined and presented to the main users, it took two years of discussions with the data suppliers - the mortgage lending institutions - to implement and carry out the collection of the required data. Due to the bank client confidentiality in Switzerland, we had to develop a survey technique suitable for both parties.

3. Where does your data come from?

The mortgage lending institutions (until now the banks) send us on a quarterly basis details of the property transactions they have funded. These institutions have high quality data with all the structural variables we need. An electronic collection system has been set up for this purpose, thus keeping to a minimum the burden on these institutions.



4. Why were the mortgage lending institutions chosen? Are these data not available elsewhere?

While the concept of the project was being defined, the FSO made a list of all potential suppliers. To do this, it looked very closely at the necessary steps in buying a property. It then assessed the advantages and disadvantage of each potential source. Potential sources included the land registers, notaries, the tax administration, real estate agencies and the mortgage lending institutions. The latter had the best and most complete data, which were readily available and in electronic form.

5. How much of the market does your data cover?

Currently, there are only rough estimates of the total number of real estate transactions on the Swiss market. For this reason the FSO will conduct an annual survey of the land registers.

The cantons of Basel-Stadt, Basel-Land, Geneva, Ticino and Zurich are exceptions: the cantonal statistics offices publish their own real estate statistics based on land register data. In these cantons, the data that the FSO collects from the mortgage lending institutions cover the majority (between 50% and 80%) of all transactions in the canton (including transactions for non-residential purposes).

We know that the vast majority of real estate transactions are funded by the mortgage lending institutions in Switzerland. We think, therefore, that we have a large part of the market covered.

6. How did the FSO decide on its sample size?

The mortgage lending banks were selected according to their mortgage volume: in 2017, the 26 mortgage lending institutions chosen represented almost 90% of all mortgage loans in Switzerland.

7. Why are not all banks taking part?

For reasons of proportion. The 26 banks selected cover almost 90% of the mortgage market, which is sufficient for us. Of course, the FSO will see how the market develops and we may add a new mortgage lending institution to our sample.

8. Does the FSO survey contravene bank client confidentiality?

No, the mortgage lending institutions do not provide us with any client information; the FSO is only interested in the property and its characteristics.



9. So the FSO does not know who bought the property?

The FSO knows that a residential property has been bought, knows its transaction price and structural and location characteristics, but does not know who bought or sold a property. Data are anonymised at source by the mortgage lending institutions, in terms of both the person and the exact address of the property.

10. How is the survey of the banks actually carried out?

When we implemented the survey with the mortgage lending institutions, we provided them with a list of the variables we need. On this basis, the banks created an automated process for the input file. Every quarter, we send the banks a database drawn from the buildings and dwellings register containing variables on the macro and micro location. Using specially developed software, the banks enrich their own data with our database. Once the data have been enriched, the property's address is deleted and the data are sent to the FSO via a secure channel (Secure Mail or Sedex).

Precise details on how the survey is run can be found on the website: <https://github.com/bfs-preis/impi/wiki>

11. Many private institutions already publish real estate price indices. Is the FSO in competition with them?

Many private institutions already publish real estate price indices. But they provide results with a high level of detail. The FSO does not wish to achieve that amount of detail. Our aim is to produce an index in line with international guidelines (IMF, OECD, Eurostat) at an aggregated level. We will be publishing price changes in residential properties (single-family homes and condominiums) for all of Switzerland as well as by five municipality types (large towns, medium-size towns, small towns, peripheral and rural zones).

Furthermore, to start with the FSO will not have any long-term series. Results from private institutions will therefore continue to be used and without doubt will provide useful and much appreciated information.

12. How often will results be published, and with what delay?

Results will be published on a quarterly basis, about six weeks after the quarter under observation. Results for the 1st quarter 2021 will be published mid-May, for example.

13. Why have you chosen a quarterly rhythm?

This is the standard frequency for measuring property price change and is used by most countries. It is a fair compromise between our users' needs, the burden on our data suppliers and for the FSO.



14. Are other property price indices planned (commercial or investment properties)?

Our users have informed us that they are interested in other property prices indices as this is a very important sector in our economy. It is possible that in the medium and long-term, our offer will be extended if are commissioned to do so. At international level, many countries have begun produced indices for commercial property prices.

15. Each property is different. How do you compare properties from one quarter to the next?

It is true that the same property is never sold twice. In addition to the transaction price, which is our base variable, we collect a range of structural variables (number of rooms, year of construction, land area, and number of bathrooms, etc.), and location variables (proximity of public transport, view, and noise, etc.). These variables allow us to compare the quality of properties over time: using a hedonic model, we calculate an imputed price that we then use to adjust the quality of properties sold in the previous quarter and those in the quarter under observation.

16. What is a hedonic model?

It is an econometric model that shows the relationship between the transaction price and its different characteristics. Using data gathered between 2017 and 2018, we established the relationship between the price and the number of rooms, the price and the land area in m², the price and the year of construction and so on for all variables.

We use this model to adjust the quality of properties from one quarter to the next. Each actual observation is entered into the model and an “estimated” price is calculated. The price difference between the estimated price from one period to another represents the difference in quality.

17. Could the hedonic model that you use be used to estimate a property's value?

No, the hedonic model cannot be used to estimate the value of a house or condominium. It was developed solely to adjust the quality of properties from one quarter to the next, and is therefore for statistical purposes. We shall leave property valuations to the professionals!

18. Is the official residential property price index constructed in a similar manner to international official indices?

Yes, the methods meet international standards.

19. Why did you choose to stratify by municipality types?

The municipality type (large, medium and small town, intermediate and rural municipalities) has a major impact on price change as there is huge inequality in the surface area available



for real estate. The dynamics of price change are not the same in large town centres as they are in rural regions; that is why we think users may be interested in this distinction.

20. Why is the FSO not publishing sub-indices by major region?

The seven major statistical regions as defined by the FSO for other statistics are not significant enough for the IMPI. They intersect different market regions and incorporate different market dynamics.

21. And why is there not an even finer stratification, at cantonal and even municipal level? There would surely be an interest in such information.

There is an insufficient number of transactions in some small cantons to publish results at cantonal level. For large cantons, it would make sense but there are already the cantonal statistics offices, which have cantonal real estate information, either by using the land registers or by contacting notaries. At municipal level, the number of observations is insufficient.

22. Private suppliers publish their indices just several days after the end of the quarter. Why does the FSO take a month and a half to do so?

The FSO's survey procedures are different to those of private providers. The FSO survey is based on data from the mortgage banks' IT systems. The institutions have to finalise the quarter's activity, then export the data and enrich them using the FSO's IT module. They then have to transfer all the enriched and anonymised data to the FSO. Once it has received the data, the FSO checks and validates the data's plausibility and if necessary contacts the data supplier. The FSO does not exclude the possibility, that with increasing routine, the processes might become faster and results could be published sooner. In the initial phase, the FSO attaches more importance to checking and validating the plausibility of data and results than to the speed of publication.

23. Do you know who will use your new index?

Throughout the project, a group of future users, data suppliers, academics and other real estate market specialists supported and accompanied us. This new index will be used to monitor the real estate market, for monetary policy, by international organisations (Eurostat, OECD, IMF) and by anyone interested in price change in the real estate market. The SNB, SECO, FINMA have all let us know that they are interested in our new indicator.

24. From all the property price indices published, which one should users choose, which one is correct?

The results depend on the coverage (sample) and the methods used (calculation methods, quality adjustment techniques, etc.). These price indices are a set of statistics. To interpret these statistics correctly, if possible one should know how they were constructed, what their coverage is and the methods that were used.



In the real estate sector, the methods chosen to compare and adjust the quality of properties are many and varied. Depending on the choice made, results can differ. Market coverage is also a very importance factor that needs to be considered.

25. Could the individual data at your disposal to calculate the index be made available for research and analysis?

No, these data will not be available as they are subject to statistical confidentiality.

26. How much does the production of these statistics cost?

Three members of staff have worked on the development of these statistics and will ensure the statistics' production and its continued development. The IT application used is the same as for the other price statistics - we had development costs for complementary module and the specific module for the banks.