Referee Report on "Did the exchange rate interventions enhance inflation in Switzerland?" submitted to Economics (MS 2408)

This paper examines the exchange rate pass-through (ERPT) into Swiss inflation for different episodes, namely the pre-crisis and the intervention periods. The authors implemented vector autoregressive (VAR) models to gauge the exchange rate transmission to different price indices, and found a higher ERPT during the exchange rate interventions.

While the topic is worthy of investigation, the paper suffers from various drawbacks and there are several concerns mainly about the exposition. The contribution of this paper is trivial, and the motivation is weak too. Also, the empirical approach used is quite common in this line of literature.

To recommend acceptance at a journal of the standing of Economics, the authors should provide clear contribution with respect to the recent literature. For instance, the Introduction section never clearly spells out what is new in the paper relative to the existing literature. Outlining the novel contribution of a paper is one of the key roles of the Introduction. Also, the comments remain highly descriptive and there is no economic policy recommendation although this is crucial when dealing with such topic.

In what follows, detailed remarks are provided which aim notably at specifying these concerns:

- 1. The Introduction section has to be rewritten in a more convenient way in order to put forth the contribution of your paper with respect to the existing literature. No literature is mentioned in the introduction! How can you motivate the contribution of your work without discussing and giving an overview of the literature? Where is the gap in the existing literature? And the expected added value of your study in this regard? Thus, I recommend, in addition to the Section 2 named " Theoretical background", you have to discuss the existing literature and emphasize on your contribution in the Introduction.
- 2. In line with my previous comment, I am surprised that there is no discussion of your empirical approach in the Introduction section. In other words, the implementation of VAR models is not justified. In fact, there are several advantages in adopting simultaneous equation approach. For instance, VAR models are proposed to solve endogeneity problem inherent in the single-equation-based methods. As you may know, according to PPP theory, the relative price levels may drive the exchange rate, then there could be a two-way causality between these variables. Also, the VAR system provide estimated impulse response functions which trace the effects of a shock to one endogenous variable on other variables, allowing the assessment of ERPT not only within a specific time period, but also its dynamics through time. Furthermore, as your model incorporate prices along the distribution pricing chain, *i.e.* import prices, producer prices and consumer prices, the VAR framework has the advantage to allow for underlying dynamic interrelations among prices at different stages of distribution and other variables which cannot be done within single-equation method.
- 3. At the same time, many empirical studies have adopted the modelling strategy of McCarthy (2007) to estimate the ERPT along the distribution chain (see e.g. Ca'Zorzi et al., 2007; Choudhri et al., 2005; Faruqee, 2006; Hahn, 2003, to name but a few). For an extensive

literature review of VAR studies see Ben Cheikh and Louhichi (2015). Thus, I find that the Section "Theoretical background" is quite poor in terms of discussion of the existing literature.

- 4. Also, your study is quite similar to the paper of Stulz (2007) who investigates the passthrough into different prices for Switzerland using VAR model. What is the contribution of your work with respect to Stulz (2007)?
- 5. You should explain why the degree of pass-through gradually declines along the distribution chain. Several explanations have been put forward by ERPT literature. For example, imported goods have to go through distribution sector before they reach consumers in domestic country. Thus, local distribution costs (such as transportation costs, marketing, and services), may cause a wedge between import and consumer prices. Also, competitive pressure in distribution sectors may explain why consumer prices do not respond dramatically to exchange rate changes.
- 6. In page 4, what do you mean by "the pass-through is larger if the exchange rate is generally stable"? It is well-know that ERPT could be influenced by the exchange rate persistence. As in McCarthy (2007), the persistence of exchange rate changes is found to be positively correlated with the extent of pass-through to consumer prices. Also, the rate of pass-through could be influenced by the magnitude of currency changes. For instance, Ben Cheikh (2012) revealed that large exchange rate shocks elicit greater pass-through than small ones. Therefore, I do not really understand how ERPT is higher for stable exchange rate?
- 7. I think the use of term "Structural" VAR (SVAR) is not appropriate. In your study, you implemented the traditional orthogonalized Cholesky decomposition to identify the structural shocks. As you know, the recursive structure implies that the identified shocks contemporaneously affect their corresponding variables and those variables that are ordered at a later stage, but have no impact on those that are ordered before. This recursive structure, which is sensitive to the ordering of the variables, is considered as "atheoretical". However, Structural VAR (SVAR) should be based on some theoretical restrictions which are compatible with economic theory (ISLM framework, aggregate demand equation, money demand equation, interest parity equation, etc.) where non-recursive structures are allowed (for SVAR with contemporaneous restrictions, see e.g. Blanchard and Quah, 1989; Clarida and Gali, 1994). Thus, it will be more appropriate to use the acronym VAR instead of SVAR.
- 8. In page 5, $X_t = f(OIL_t, Y_t, INR_t, EXR_t, IPI_t, CPI_t)$ is not an appropriate presentation of a VAR model, this would rather correspond to the vector of endogenous variables. You have to properly present the framework of a VAR model (see Sims, 1981). Also, you should explicitly present the system of equation from which the effects of exchange on prices are derived.
- 9. If standard stationarity tests, such as ADF and KPSS, are not conclusive about the order of integration of the producer prices (PPI), you should implement further tests which are more robust. For example, the DF-GLS test proposed Elliott et al. (1996), which is an augmented Dickey-Fuller test where the time series is transformed via a generalized least squares (GLS) regression before performing the test. This test has significantly greater power than the previous versions of the augmented Dickey-Fuller test.

- 10. In line with my previous comment, the authors argued that mixed results from ADF and KPSS tests can be explained by the possible presence of a structural break in the data. In this case, you should implement unit root tests that take into account the existence of shifts in the series such as Zivot and Andrews (1992) and/or Lumsdaine and Papell (1997). Zivot and Andrews's (1992) unit root test allows for one single break under the alternative hypothesis. Lumsdaine and Papell's (1997) test is the extension of the Zivot and Andrews (1992) model, allowing for two structural breaks under the alternative hypothesis.
- 11. The cointegration issue is neglected in the paper. There are some reasons to expect the presence of a long-run equilibrium relationship between variables entering the ERPT equation. In this case, a VECM model would be more appropriate as it allows to take into account of the non-stationarity of the data, and at the same time disentangle short- and long-run dynamics.
- 12. Finally, the paper needs to undergo a thorough proofreading by a native English speaker as it contains a fair share of grammatical mistakes. For example, in the abstract, the sentence "Despite the effect's moderate influence", what does it mean?

Minor corrections:

- In page 2, you should be careful about the definition of ERPT. As reported in Goldberg and Knetter (1997, p. 1248), the exchange rate pass-through (ERPT) is defined as "the percentage change in local currency import prices resulting from a one percent change in the exchange rate between the exporting and importing countries". Later the concept has evolved over time to include other types of prices, notably producer prices and consumer prices.
- In page 3, you mentioned that "pass-through of exchange rate shock into prices is theoretically expected to be equal to one". For more accuracy, you should discuss the pass-through mechanism and its determinants. Then, you should explain why there can be a full, partial or zero ERPT.
- In page 3, for partial ERPT, you should say "incomplete" not "uncomplete".
- You should start numbering sections with the Introduction (must be set as Section number "1").
- Why the tables for unit root tests (ADF and KPSS) results are not reported in your paper? The same thing for lag length selection results.
- In the top of page 8, you say "In this chapter...", you should replace chapter with section.