## BEATRICE WEDER



## Comments on Nuno Alves, "Financial Market Frictions and the Monetary Transmission Mechanism in the Euro Area"

Understanding the impact of financial market frictions on the monetary transmission mechanism is crucial in several dimensions. First for assessing the aggregate impact of monetary shocks, second to understand differential reactions across countries of the euro area and third to understand the feedback of the latter into the common monetary policy. The paper by Nuno Alves presents an extremely useful summary of the state-of-the-art and the state of our knowledge on these issues. I will argue that it also illustrates the areas of our ignorance.

The paper starts by pointing to the progress of financial market integration in different segments: convergence in bank margins and retail rates, government bond yields and volatility, issuance on the corporate bond market and the full integration of the unsecured money markets. In all areas European financial markets have undergone rather large changes over the course of the last years.

On the other hand, and this is the next point, it is also easy to identify markets where segmentation and frictions persist. These include the secured money market, equity markets and credit markets. Reasons for segmentation range from contractual and habitual differences to differences in regulatory and settlement systems.<sup>1</sup> For instance, historical differences in the shares of fixed to variable rate lending across countries can lead to differential impact of a common monetary shock across countries.

How is it possible to evaluate the impact of such frictions on the monetary transmission mechanism? Nuno Alves argues that a general equilibrium view is called for. Any analysis that starts by investigating the monetary transmission channel by channel may misrepresent the aggregate picture, since it cannot capture the interactions between different channels. This is a fair point and important criticism of what I would call the micro view, which proceeds by isolated individual channels and investigates their functioning independently of each other.

Alves then shows that a general equilibrium model can accurately reproduce observed features of the data. The model incorporates various frictions (habit formation in households preferences, nominal friction in wage and prices, variable capacity utilization by firms) but it does not have any friction in financial markets. Prima facie this is rather surprising. And in fact the author is quick to say that this does not mean that frictions of financial markets are irrelevant. But he also suggests that they must be nearly-irrelevant, since he does not need them to reproduce the data.

At this stage we are confronted with a sort of puzzle. Financial market frictions are abundant and can be easily identified at the micro level, but they do not seem to appear on the macro level.

In some ways this seems a similar puzzle as the one suggested by Robert Solow - before the take off of productivity. I mean the famous phrase "Where are the computers? -They are everywhere but in the macro data puzzle." It also seems that the way solutions where sought to the puzzle is instructive here. One group doubted that the macro view was correct and tried to find flaws in the measurement of technological change in macro growth data. The other group doubted the micro evidence claiming that the existence of computers alone did not mean that they were being used for productive purposes.

Similarly the "Financial Frictions Puzzle" can be solved by questioning the macro view along the following lines: Granted that a model without financial frictions can reproduce the data, this does not necessarily mean that the model is correct. It may be introducing other frictions or exaggerating other frictions that mimic the financial friction. Admittedly, the real challenge for a model that "works" without financial frictions has to be another model that reproduces the data equally well with a financial friction. But even in the absence of a direct competitor, it just seems difficult to believe that further integration of financial markets in Europe would not have any impact on the transmission channel.

See for instance, Cecchetti (1999) or Lamfalussy Report (2001).

The second possibility to solve the puzzle is to doubt the micro view that is to find reasons why observed frictions might not introduce large distortions. This is the path that Alves takes. He argues that expectations about the systematic part of monetary policy would decrease differences between systems the with fixed and variable rate funding. In this case, the ECB which is rightly proud of its good performance in anchoring inflation expectation would take the credit. Another argument is that the (increased) level of competition between banks might already be sufficient to not cause any distortions in the monetary transmission mechanisms. More generally, the level of development of financial markets in Europe may simply be sufficient to not introduce substantial distortion. Although these arguments sound plausible, I believe they are not sufficient to solve the micro-macro puzzle. And the evidence on segmentation just seems a bit too overwhelming to support the irrelevance-view.

Segmentation and heterogeneity across countries is the topic of the last section of the paper. This seems a very important section and might have deserved further elaboration. The model that was described above was calibrated to fit the aggregate data and therefore would fit an average level of financial sector development. It is therefore silent about the differential impact of a common monetary shock across countries with segmented financial systems. This question is relevant not only from the point of view of individual countries but also because differences in impact and speed of transmission may feed back into the process of common monetary policy making.

And the significance of this issue is even amplified with the eventual entry into Economic and Monetary Union (EMU) of the ten new EU Member States.

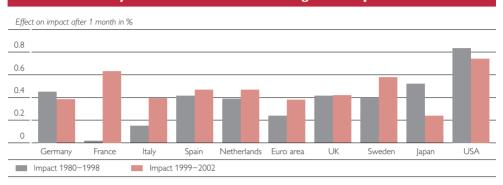
In order to illustrate the extent of remaining heterogeneity across the euro area countries I show the impact of money market rates on lending and deposit rates. The numbers are taken from the study of Angeloni and Ehrmann (2003), who estimate the impact on a large num-



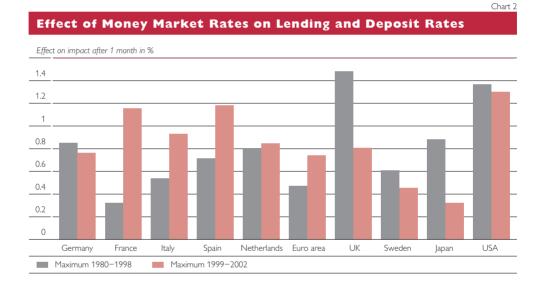
ber of lending and deposit rates in every country within a Value-At-Risk (VAR) framework.

Chart 1 shows the effect of changes in money market rates on deposit and lending rates after one month. The chart illustrates estimates for the pre-euro period and estimates for the period after the euro was introduced. In addition to euro area countries, the chart also includes some countries from outside the euro area, which can serve as of control group.

The most notable feature of chart 1 is that there are differences between the pre- and post-euro introduction. In France, Italy, Spain and the Netherlands the impact of money market rates on lending and deposit rates increased, in the case of France dramatically so. The level of impact overall has increased and the variation across countries within the euro area has diminished after the introduction of the euro. Note,



## Effect of Money Market Rates on Lending and Deposit Rates

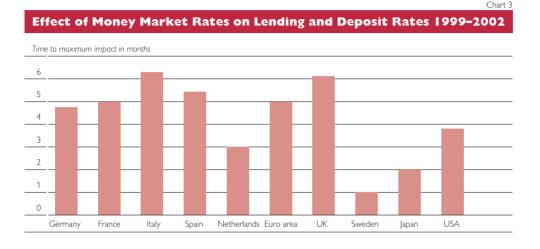


however, that some non-euro area countries such as Sweden and Japan have also seen large changes between these two periods. Thus the evidence on the role of the euro in harmonizing interest rate transmission is not conclusive.

Chart 2 shows the *maximum* impact of money market rates on deposit and lending rates, whenever it occurs. The message is similar as in the last chart: the level of transmission has increased and the variation decreased across countries within the euro area. For a number of countries outside the euro area the impact has diminished quite substantially. One interesting observation is that the UK seems to have converged to the euro area average.

Chart 1

Finally, chart 3 shows the time it takes for the maximum impact to be reached in each country. I am only showing the estimates for the period from 1999 to 2002. Again the divergence within the euro area seems somewhat smaller than outside the common currency area. However this graph also illustrates that the differences in transmission speed remain significant in some cases. Take the most extreme ones, it takes six months in Italy for a shock to money market rates to reach its maximum impact on lending and deposit rates, but it only takes three



months in the Netherlands. This means that rates in the Netherlands will already have started declining again when they are still working their way through the system in Italy. Such heterogeneity cannot be ignored, both from the view of the individual countries and for the optimal conduct of the common monetary policy.

Summing up, I think that the paper by Nuno Alves is an excellent paper that presents the "macro thinking" about financial frictions and the monetary transmission mechanism. The resulting "Irrelevance-Proposition" is puzzling and fits imperfectly with the evidence of fractionalization and segmentation across markets and countries. Therefore, one of the implications of the paper seems to be that further research is needed, which should eventually integrate the micro and the macros views.

## References

- **Cecchetti, S. 1999.** Legal Structure, Financial Structure and the Monetary Policy Transmission Mechanism. Federal Reserve Bank of New York. Economic Policy Review. July. 9–28.
- Angeloni, I. and M. Ehrmann. 2003. Monetary Policy Transmission in the Euro Area: Any Changes after EMU? ECB Working Paper 240.
- **Lamfalussy Report. 2001.** Final Report of the Committee of Wise Men on the Regulation of European Securities Markets. Brussels.