The University of Manchester

Economics
Discussion Paper Series
EDP-1711

Harbingers of Modernity: Monetary Injections and European Economic Growth 1492-1790

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October 2017

Economics
School of Social Sciences
The University of Manchester
Manchester M13 9PL

Harbingers of Modernity: Monetary Injections and European Economic Growth, 1492-1790

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PhD dissertation summary, forthcoming at: *European Review of Economic History*

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JEL codes: E40, E50, N13, O40

Keywords: Early modern monetary injections, liquidity effects, monetary non-neutralities, historical money supply, economic growth

In this PhD dissertation I assess some of the effects for the early modern European economy which resulted from the large-scale discovery and exploitation of precious metals in the New World. I argue that the monetary injections which were a direct result of the increased availability of precious metals were an important cause of stimulus for several early modern European economies. The thesis mainly consists of three papers. In the first paper I argue variation in production of precious metals in America can be helpful to identifying the causal effects of money in a macroeconomic setting. Using a panel of six European countries for the period 1531-1790, I find strong reduced-form evidence in favor of non-neutrality of money for changes in real economic activity. The magnitudes are substantial and persist for a long time: an exogenous 10% increase in production of precious metals in America leads to a hump-shaped positive response of real GDP, peaking at an average increase of 1.3% four years later. The evidence suggests this is because prices responded to monetary injections only with considerable lags. The following two chapters are focused on different aspects of the measurement and analysis of the causal effects of the monetary injections for the English economy. In the second paper, I put forward new data on annual coin supply for England over the long run.[1] This is offered not only as a data

[1] This data has now been adopted by the Bank of England; see "A millennium of macroeconomic data" at: http://www.bankofengland.co.uk/research/Pages/datasets/default.aspx#threecenturies

construction exercise within the specific context of England, but also as a methodological contribution which in principle can be reproduced for some other countries. Finally, in the third paper, I present a historical discussion of the long-term effects of the early modern monetary injections in the context of the English economy. I show the increased availability of precious metals led to liquidity injections which matter for our understanding of the English industrious, industrial, and financial revolutions during early modern period.

The "big picture" message of my thesis is that changes in money supply can have casual and quantitatively large effects on the performance of the economies affected – including over the long run. This message speaks to both the historical and the monetary economics literatures.

To the historical literature, I point out that monetary developments deserve a more central explanatory place in understanding the performance of the European early modern economies than has been so forth attributed. My thesis is essentially about one aspect of the "Columbian exchange" (Crosby 2003/1967) which deserves careful attention: the enormous endowment of precious metals which became gradually available in America in the early modern period. While recent papers have considered quantitatively the importance of aspects such as new crops, particularly potatoes (Nunn and Qian 2011), there is no modern quantitative research which considers the quantitative impact of an "elephant in the room": the large-scale discoveries of precious metals, which allowed for a large-scale monetary expansion in Europe. O'Rourke and Williamson (2002) argue that globalization only began in the nineteenth century. Wherever this is true or not largely depends on the definition of globalization, but my thesis shows that the New World was having a decisive impact for the historical development of Europe well before the nineteenth century.[2]

To the macroeconomics and monetary economics literature, I point out that there is very strong evidence that exogenous changes in money supply have real effects in the "short run", because prices were sticky in the early modern period, just as they are today.[3] But I also show that historically, there have been long run effects, because as increases in production of precious metals in America lead to temporary increases in European growth

[2] See also Palma (2016), Palma and Silva (2016), and the literature reviewed in these papers.
[3] This was also shown in the context of asymmetric reactions to unit-of-account changes in eighteenth-century France by Velde (2009), who furthermore showed that financial prices were the quickest to react.

rates, they also lead to permanent effects for income levels. This suggests that the doctrine of long-run monetary neutrality (see for instance Taylor 1999) is false. Nevertheless, my emphasis is on monetary developments as necessary, not sufficient, conditions for the emergence of modern economic growth.

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