Journal of International Money and Finance 32 (2013) 377–404

Contents lists available at SciVerse ScienceDirect

Journal of International Money and Finance

journal homepage: www.elsevier.com/locate/jimf

Euro area money demand and international portfolio allocation: A contribution to assessing risks to price stability

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JEL classification:
E41
E44
E52
G11
G15

Keywords:
Euro area money demand
Inflation forecasts
Monetary policy
Portfolio allocation

A B S T R A C T

This paper argues that a stable broad money demand for the euro area over the period 1980–2011 can be obtained by modelling cross border international portfolio allocation. As a consequence, model-based excess liquidity measures, namely the difference between actual M3 growth (net of the inflation objective) and the expected money demand trend dynamics, can be useful to predict HICP inflation.

1. Introduction

This paper argues that a stable broad money demand for the euro area over the period 1980–2011 can be obtained by modelling cross border international portfolio allocation. We first observe that, in this first decade of the new millennium, the breakdown of standard money demand specifications for the euro area and the strong developments in annual M3 growth coincide with large net flows in portfolio investment in the euro area. We then estimate a new money demand, which turns out to be stable, by including variables explaining portfolio flows omitted in the traditional specifications.

The stability of money demand implies that excess liquidity measures are useful to predict inflation. For the short and medium term, we construct model-based excess liquidity measures, namely year-on-

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doi:10.1016/j.jimonfin.2012.04.012

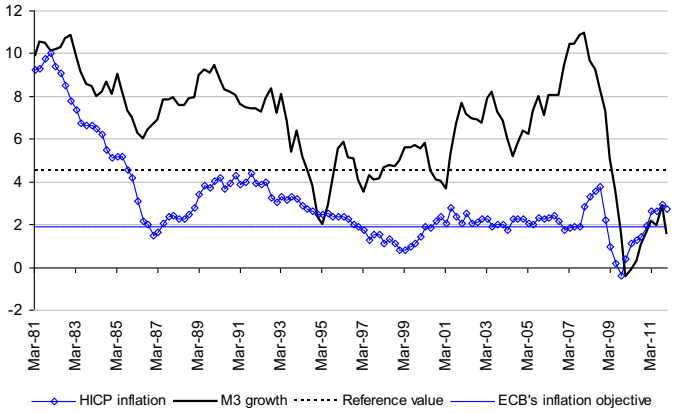

Fig. 1. Annual HICP inflation and M3 growth in the euro area. (*Annual percentage changes*).

year actual M3 growth (net of the inflation objective) minus the year-on-year dynamically simulated values of real money growth, which are able to forecast out-of-sample euro area inflation.

We also show that excess liquidity measures are more informative on future inflation developments than simple money growth indicators.

Our main argument is illustrated by Figs. 1 and 2.

Fig. 1 reports annual inflation computed using the Harmonised Index of Consumer Prices (HICP) and nominal M3 annual growth over the sample 1981–2011. Except after the exacerbation of the financial crisis in 2008 Q3, the evidence shows that, while inflation was very close to 2% with very little volatility in the new millennium, annual nominal M3 growth has been most of the time above the 4½ per cent reference value,[3] raising even to 7.1% over the period 2000 Q1–2009 Q2. This behaviour of nominal M3 growth and inflation raises a question on the nature and validity of the long-run link between money and prices.

The link between money growth and inflation in traditional money demand money relies on the hypothesis of a stationary velocity growth. Fig. 2 shows that there is a clear upward trend in (inverse) M3 velocity growth up to 2008 Q3 and a downtrend thereafter. This trend is visible in the data since 2001 and it is positively correlated with net capital flows in non-Monetary Financial Institutions (MFI) portfolio investment.[4] This stylized fact suggests that international portfolio allocation could be a key explanation for the instability of traditional money demand specification for M3 in the last decade.

Moreover, the strength of this link does not seem to weaken during the euro area sovereign debt crisis, from the end of 2009 onwards. On 16 October 2009, the Greek Prime Minister George Papandreou in his first parliamentary speech disclosed the country's severe fiscal problems and immediately after on 5 November 2009 the Greek government revealed a revised budget deficit of 12.7% of GDP for 2009, which was the double of the previous estimate. Since then, the sovereign spreads rose sharply for most of the euro area countries, causing the biggest challenge for the European economic and monetary union since its creation.

This was an event, which models could not predict. Equally unpredictable were the numerous non-standard measures introduced by the ECB such as: (i) the Covered Bond Purchase Programme launched in 2009 to reduce money market term rates and ease funding conditions for credit institutions and enterprises; (ii) the Securities Market Programme (SMP) launched in May 2010 to protect the functioning of the monetary policy transmission mechanism by addressing the malfunctioning of certain key government and private bond market segments; (iii) the long-term refinancing operations with

[3] The reference value for M3 growth has been an important signalling device of the ECB's commitment to maintaining price stability over the medium term as the latter is not compatible with excessively high or low monetary growth over protracted periods of time. However, annual money growth has been above 4½% most of the time and the divergence of money growth from this reference value was not used by the ECB as a mechanical signal of risks to price stability.

[4] The net capital flows for the euro area are only available over the period reported in Fig. 2.