Monetary facts revisited

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The paper analyzes two important monetary facts:

1. The long-run link between the growth of money and inflation;
2. The link between the credit growth and financial crises.

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Data

- The analysis covers 46 AEs and EMEs over the period 1950-2011
- Sub-periods: 1950-1984, 1985-2011 and 1995-2011
- Sub-samples of AEs and EMEs
- The analysis uses the panel annual data from these countries
- Sources of data are: IMF IFS, Global Financial Data, FRED database of the St. Louis Federal Reserve Bank, national sources

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Two empirical approaches:

1. The link between the growth of money & inflation was analyzed using the pooled mean group estimator (PMG) with the dependent variable - the GDP deflator
   - The PMG estimator assumes that the long-run coefficients remain the same and allows short-run coefficients to differ across the sectional units (Pesaran, Shin Smith, 1997)
2. The link between credit growth & financial crisis was analyzed with the probabilistic model with the dependent variable – the financial crisis indicator

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The main conclusions of the research:

- In general the research confirmed the positive impact the growth of money and inflation, and
- The positive impact of the credit growth on the probability of the crisis

Distinguishing by the level of economic development:

- The first relationship is weaker in AEs than in EMEs
- The second relationship is stronger in AEs comparing to EMEs

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Distinguishing by the period of analysis for the overall sample:

- In the period of lower level of innovation and liberalization of the banking sector (till mid-1980s) the relationship between the growth of money and inflation is much stronger than in the period of increasing liberalization of the banking sector;
- The relationship is especially weak in the recent period of low interest rate;
- The second relationship is neutral in the period of higher interest rates (1950-1984) and quite stable since the beginning of the banking sector liberalization in the mid-1980s.

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Distinguishing by the level of economic development and the time:

- The first relationship weakens faster in AEs than in EMEs
- In the low interest rate environment the rate of this relationship falls similarly in both groups of economies
- The second relationship is neutral or nearly neutral up to 1984 for both types of economies
- In the period of liberalization the second relationship is stronger in AEs however at the same level for the entire last three decades

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- The results confirm expected by some economists trends which took place in the banking sector and in the area of interaction between the financial and non-financial sectors
- The results of the research are interesting and important in case of
  - solving problems of the persistent deflation and finding tools to activate monetary policy of the central banks (first link)
  - monitoring financial stability and macroprudential supervision in preserving the economy from local or regional financial crises (second link)

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- The main area of uncertainty or criticism could be referred to the data
- Authors use data from different sources which have their individual definitions of terms taken into the research
- **Monetary aggregate** is the main area of concern – how authors organized the data for individual countries from the euro area
- ECB provides data for the entire euro zone, IMF IFS do not provide individual data on the broad money aggregate, there is no data on the websites of the national banks

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- The next variable required the precise definition is the **credit to non-financial sector** (which banks included to the value of credit – domestic banks, or all banks operating in the country (branches of the credit institutions and cross-border lending by larger international banks)
- Authors should in the appendix precisely **explain definitions of every variable** to enable a reader getting a broader view on the analyzed problem

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- Concerning the first relationship – authors might consider to change the **GDP deflator** to the **consumer price index CPI**
- Central banks use CPI to monitor and adjust their monetary policy to the inflation target
- The research has more the form of confirming the relationship – no clear indication of the possible application of the findings of the research

Thank you for your attention !