

Dollarisation of the eurozone

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Note: incomplete version

Summary

1. The original purpose of monetary union was to assert the autonomy of European macro-policy as against pressures from the US.
2. Actual developments in the monetary union have been in the opposite direction, leading to the further subordination of the EU.
3. The proposed Capital Markets Union is intended to promote higher rates of investment but does not address the main obstacle to capital market growth – the absence of a deep, liquid bond market. This is because financial markets are fundamentally **public** institutions: both historically and analytically public finance is at their core.
4. The consequence of the economic and financial stagnation is further asymmetric integration – integration of the eurozone into the \$-based financial system. This will compromise the autonomy of EU macroeconomic policies.

Dollarisation as a process

Even in Weimar Germany not all the functions of the Reichsmark disappeared at the same time.

At present the dollar is displacing the euro as a funding currency and as a form of collateral, that is, in both short-run and longer-term credit markets, especially inter-bank markets.

The possible consequences at present do not seem dramatic but amount to a certain attenuation of monetary control.

Liquidity conditions tend to escape ECB control in that US circumstances will quickly impact on European ones.

Bond markets likewise may be constrained by the superiority of the \$ as a funding currency

In the longer term the ECB may find it necessary to prioritise the \$ exchange rate in setting monetary policy – at that point autonomy will have been decisively compromised.

1. Attacking the exorbitant privilege

Rueff, De Gaulle, French political economy in general, Werner Report, currency snake, early EMS etc.

1. German views: a purely internal role for euro

Consistent rejection of reserve role for euro – fixation on current account, early capital market liberalisation, refusal of “anchor” role in EMS.

2. Some indicators of dollar supremacy

a) Massive use of \$ swaps, not always explicit in accounts:

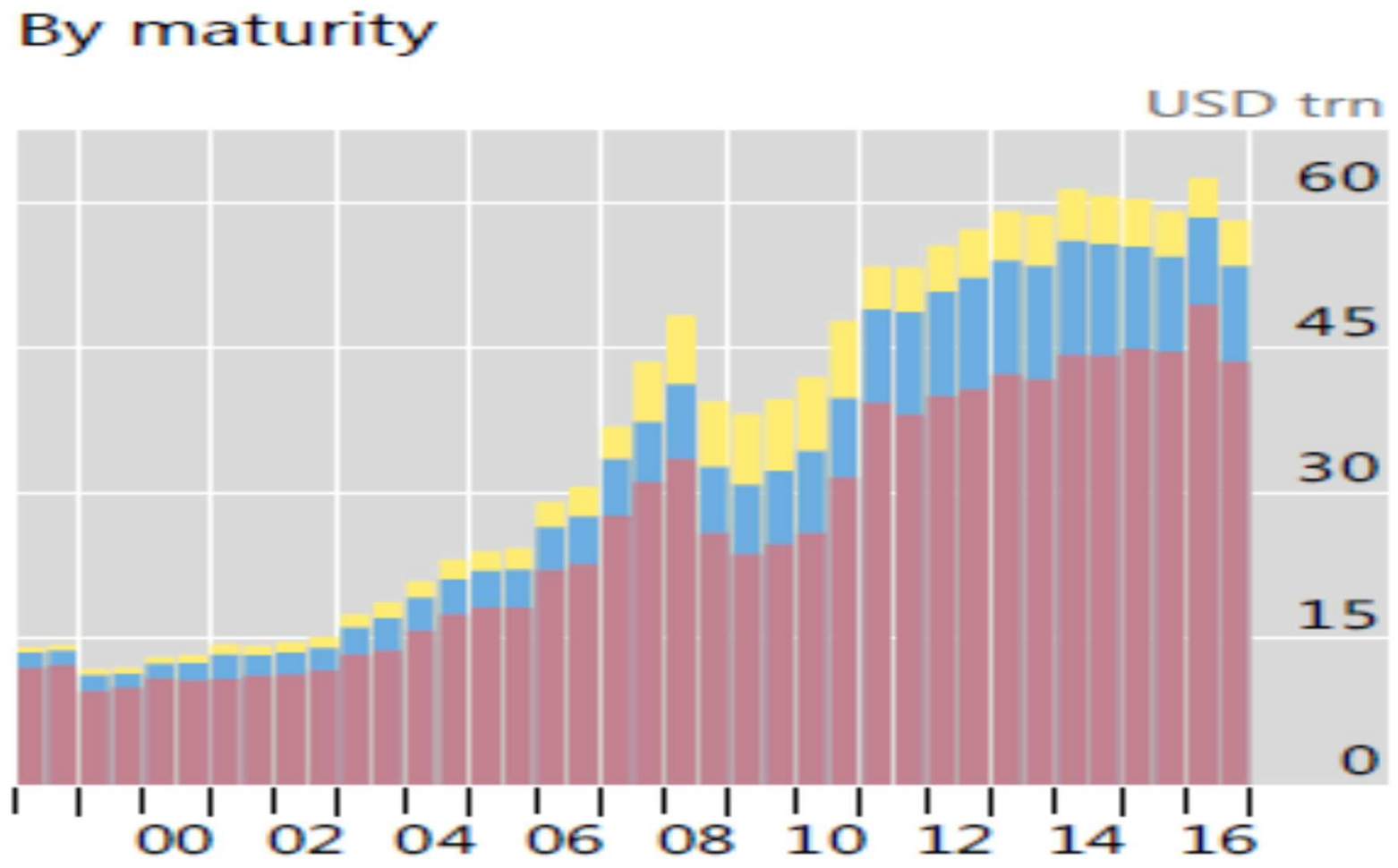
“..... foreign exchange (FX) derivatives, mainly FX swaps, currency swaps and the closely related forwards, also create debt-like obligations. For the US dollar alone, contracts worth tens of trillions of dollars stand open and trillions change hands daily. And yet one cannot find these amounts on balance sheets. This debt is, in effect, missing.”

(Borio et al., 2017)

a) FX swaps mean \$

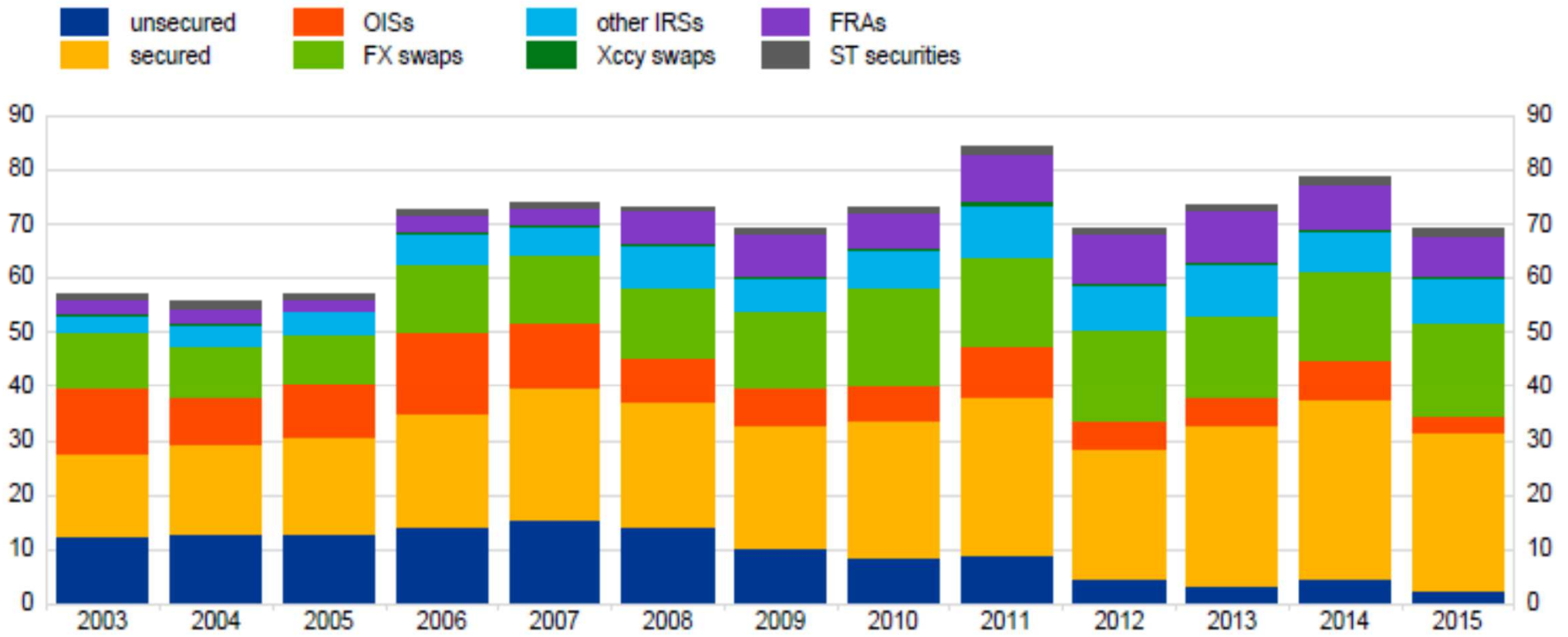
In fact, the dollar is the main currency in swaps/forwards against every currency. For instance, it predominates in forwards in the Norwegian krone, the Swedish krona and the Polish zloty, currencies that trade in the spot market more against the euro.

a) Global use of FX swaps



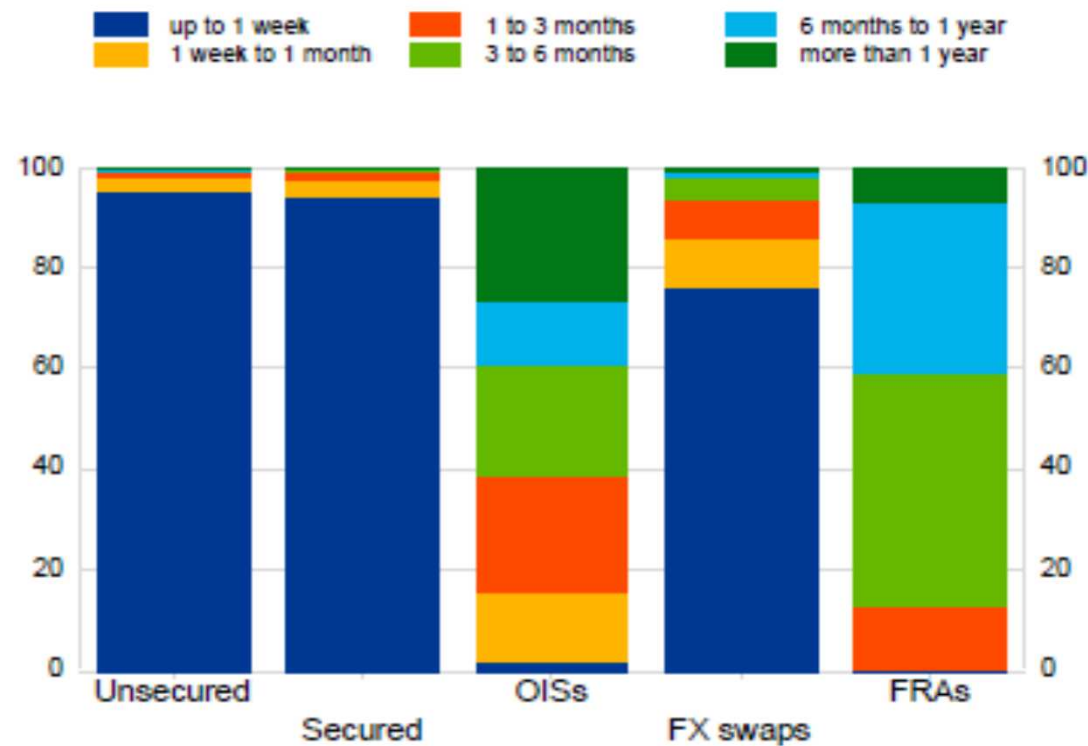
a) Eurozone: Use of \$ swaps – second to repos by turnover

Chart 1 Cumulative quarterly turnover in the euro money market (EUR trillion)



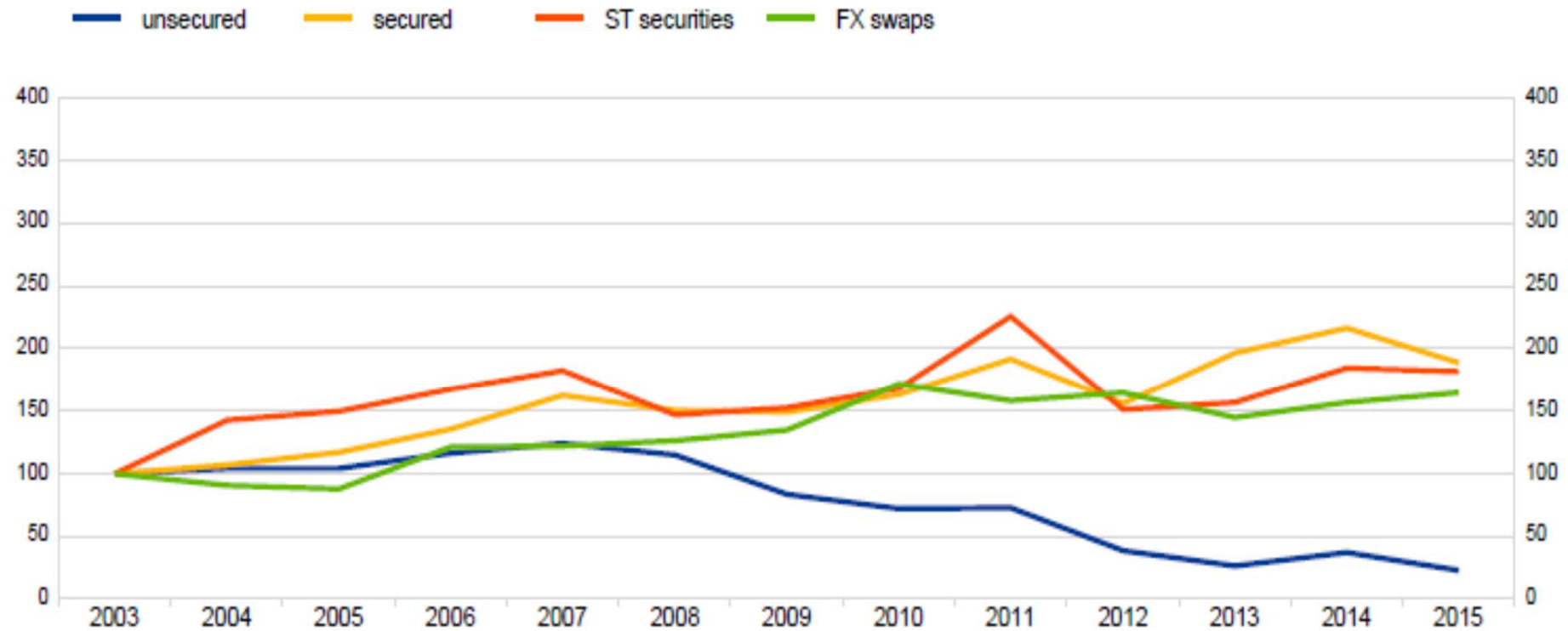
a) But longer-dated and raising more capital

Chart 6 Maturity breakdown for various money market segments in 2015
(percentages of total)



a) Note the disappearance of unsecured lending: securities are now central to inter-bank relations

Chart 3 Cumulative quarterly turnover in various money market segments
(index: total segment volume in 2003 = 100)



a) Note the disappearance of unsecured lending: securities are now central to inter-bank relations

Inter-bank lending now predominantly collateralised and the dominant form of collateral is the \$

b) The basis spread against the dollar

Agents who swap dollars for euros earn a higher yield on their euro holdings than those simply advancing euros. This gap – breach of the covered interest parity condition emerged strongly in the global financial crisis but has persisted since. It confers a strong advantage on dollar-based banks and finance houses.

It also results in a switch from the issue of euro bonds to dollar bonds even to fund euro-denominated assets with the proceeds then swapped into euros.

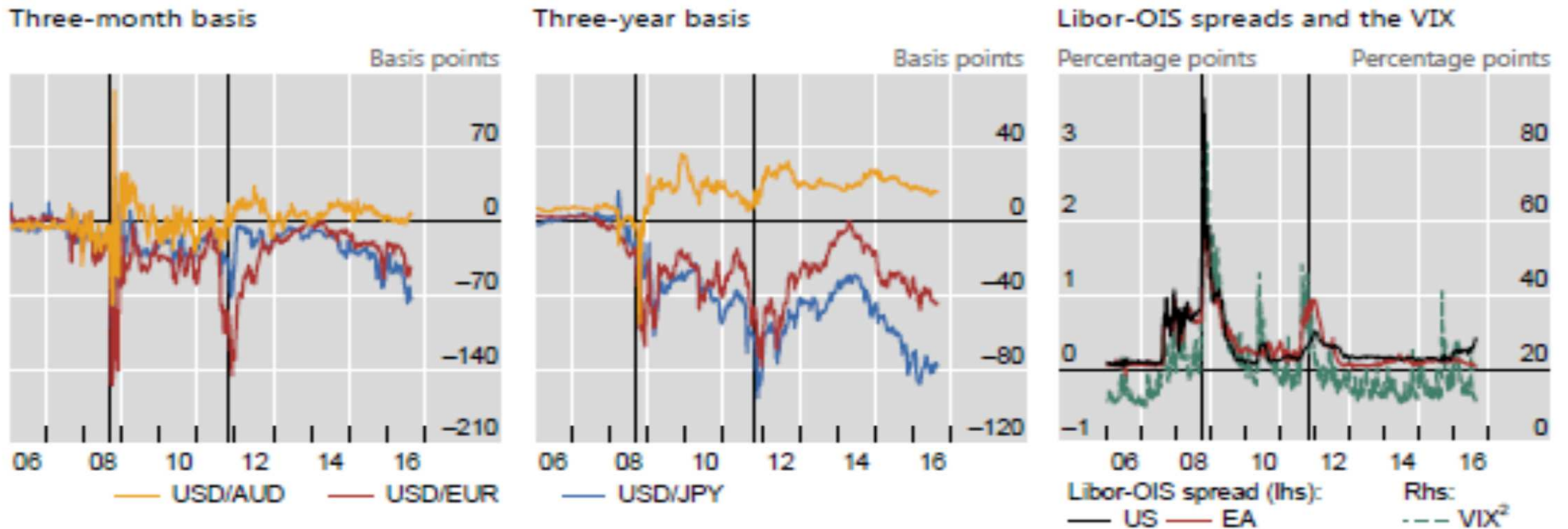
b) The basic arbitrage

- Borrow \$ at repo rate r_{US}
- Purchase spot € (first leg of FX swap) at spot rate S (dollars per euro) to obtain $\frac{1}{S}$ euros per dollar
- Lend € at repo rate r_{EU} to receive $\frac{€}{\$}(1/S)(1+r_{EU})$ per dollar
- Close FX position by forward sale (second leg of swap) to obtain $\frac{\$}{€}(F/S)(1+r_{EU})$
- Profits per \$, z are given by $z = \frac{\$}{€}(F/S)(1+r_{EU}) - (1+r_{US})$
- If CIP held we should have $z = 0$
- EU interest rates higher than is indicated by forward euro exchange rate; or forward rate F gives a bonus to the lender

b) Significant basis spread – against euro emerges in global crisis but does not disappear thereafter.

Cross-currency basis against the US dollar, interbank credit risk and market risk¹

Graph 1



¹ The vertical lines indicate 15 September 2008 (Lehman Brothers file for Chapter 11 bankruptcy protection) and 26 October 2011 (euro area authorities agree on debt relief for Greece, leveraging of the European Financial Stability Facility and the recapitalisation of banks). ² Chicago Board Options Exchange S&P 500 implied volatility index; standard deviation, in percentage points per annum.

Sources: Bloomberg; authors' calculations.

b) Significant basis spread

Implication: It is cheaper to raise \$ and swap into € to fund € assets than to raise €. This relates to next aspect of dollarization – loss of global role for the euro.

c) Declining international role of the euro

ECB Report on International Role 2017:

“... a number of indicators tracked ... show the share of the euro as having declined. This was particularly the case for **outstanding amounts of international debt securities and loans, issuance of foreign currency-denominated debt**, foreign exchange turnover and shipments of euro banknotes to destinations outside the euro area.

c) Declining international role of the euro

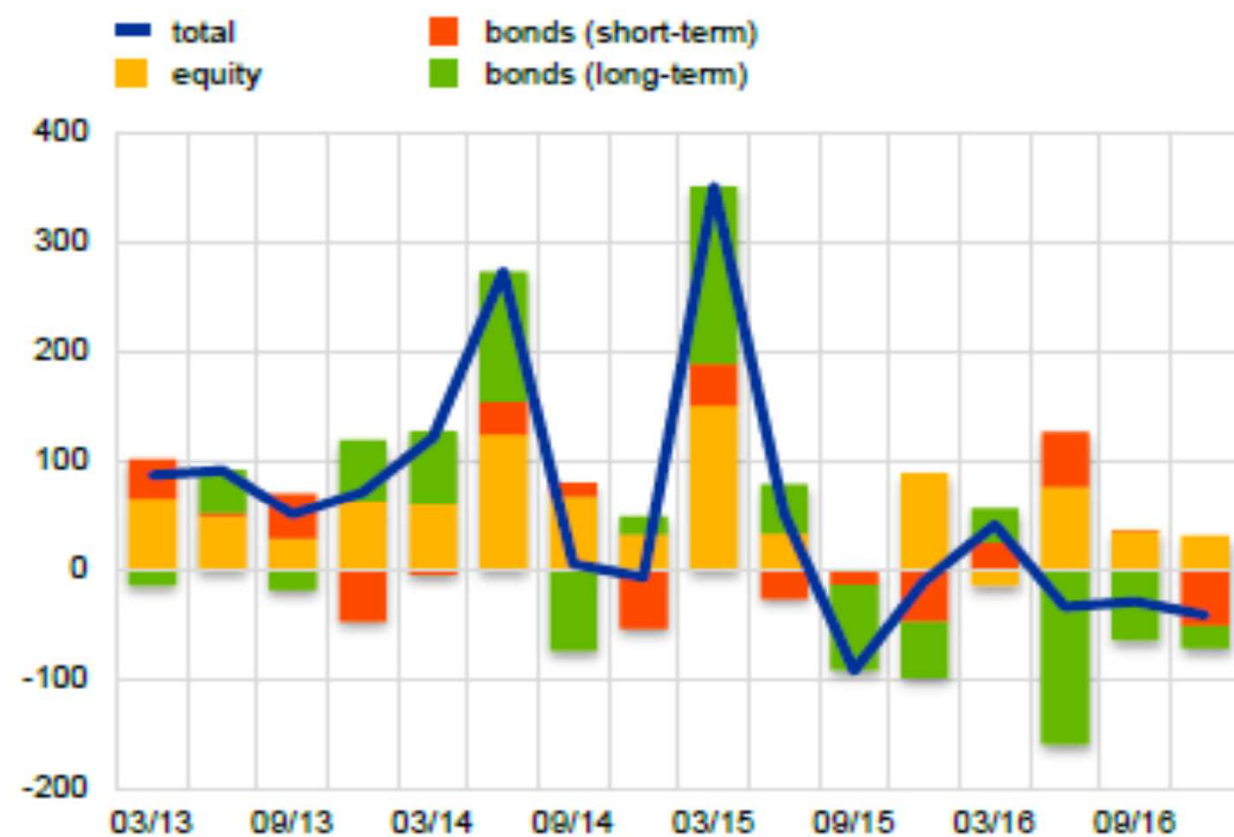
ECB view: “Moving towards a financial union consisting of a completed banking union and substantive progress towards a capital markets union can be expected to lead to deeper and better-connected European capital markets, which may contribute to the depth and liquidity of euro area financial markets and, as an indirect result, support the international role of the euro. Although strengthening the international role of the euro is not a policy objective per se, it would be a mark of the rest of the world’s confidence in successful completion of EMU.”

But will there be “deeper and better connected financial markets”?

Foreign investors rebalanced their portfolios away from euro area securities

Net purchases of foreign investors

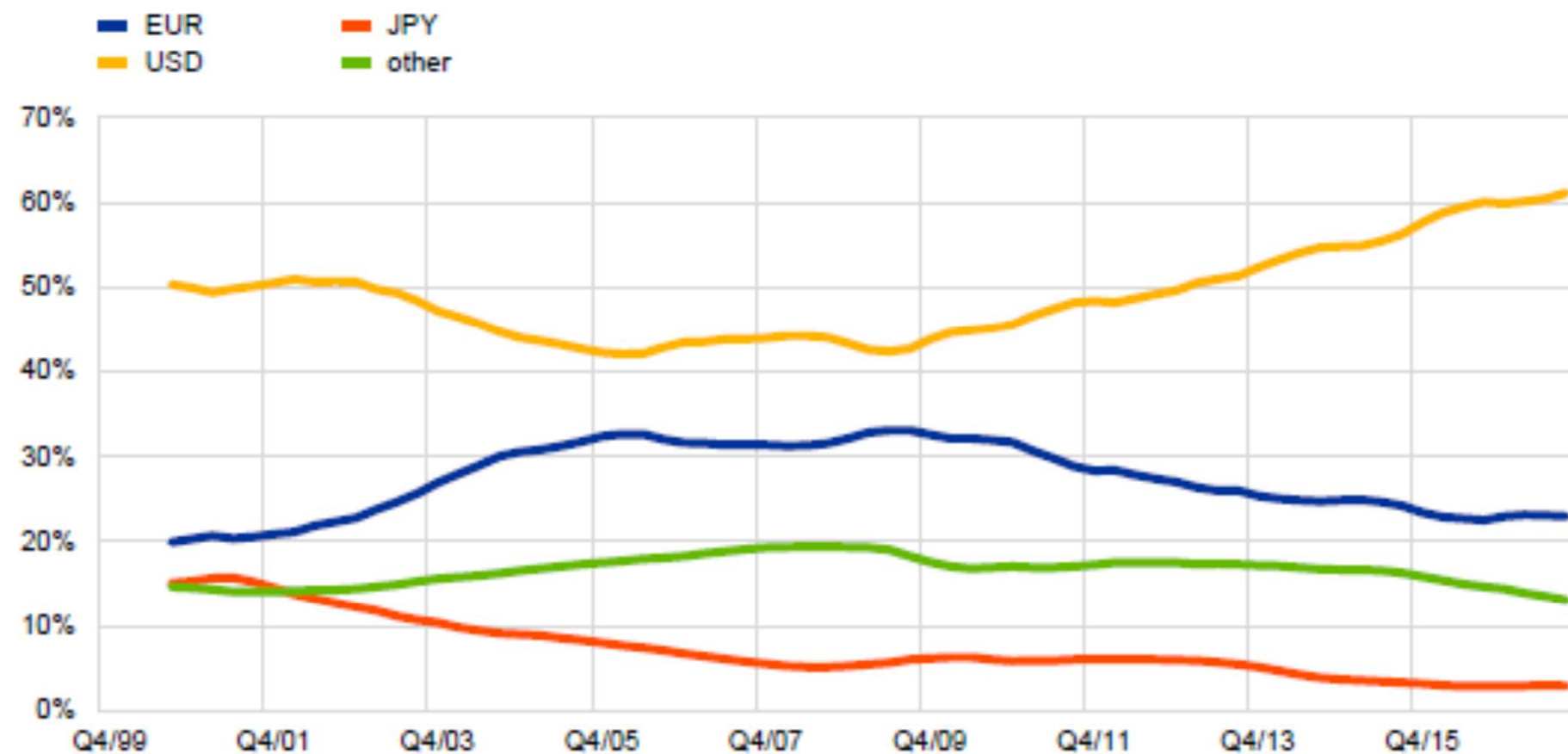
(volumes in EUR billions)



The euro's share in outstanding international debt securities declined in 2016

Currency composition of outstanding international debt securities

(percentages)

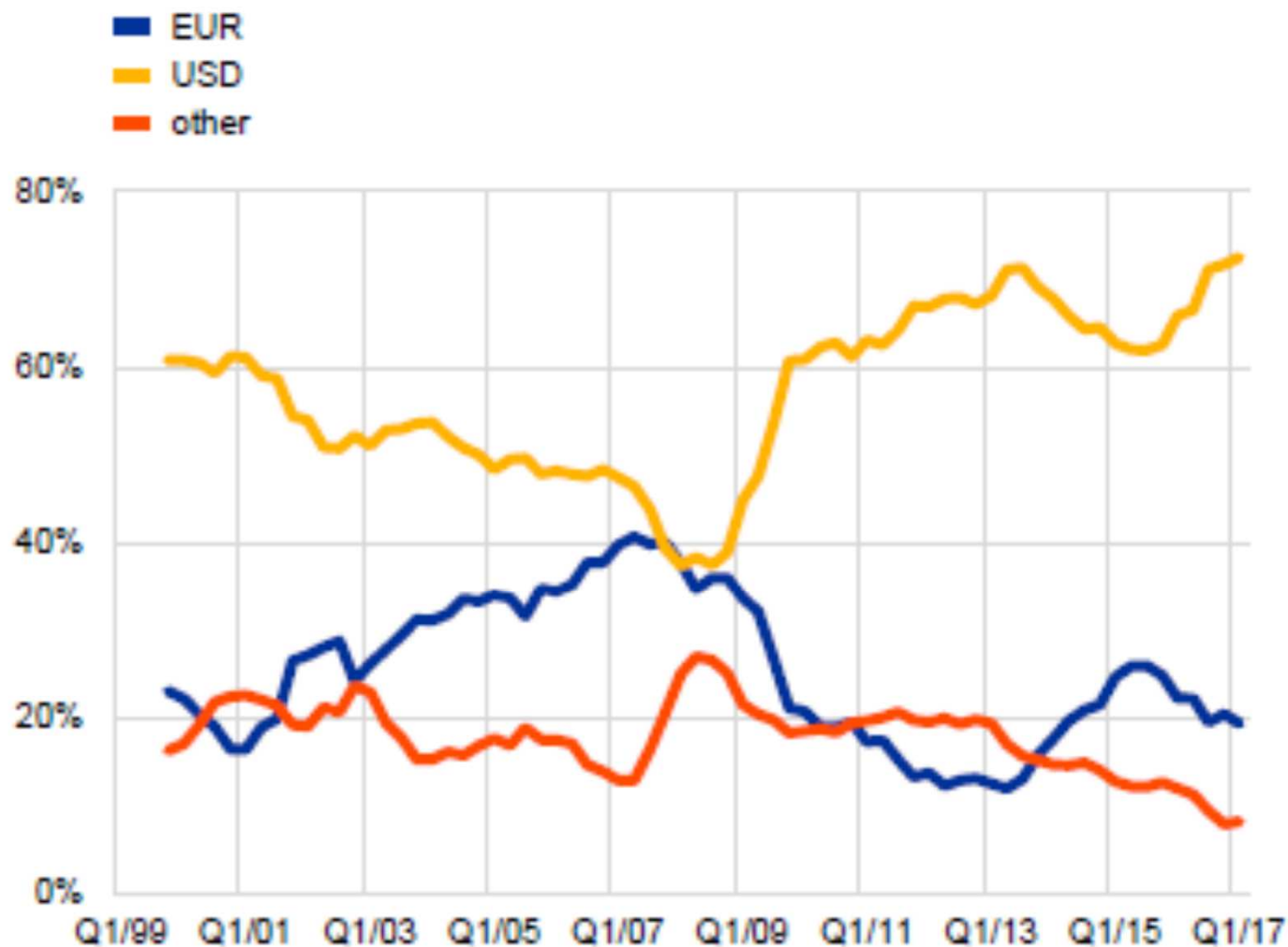


Sources: BIS and ECB calculations.

Note: The latest data are for the fourth quarter of 2016.

Currency composition of foreign currency-denominated debt issuance

(percentages)



c) Swap basis and debt issuance

Cross-currency basis of euro increased markedly since mid-2014, discouraging use of euro as funding currency

Cross-currency swap basis against the US dollar at the five-year maturity

(basis points)



Sources: Bloomberg and FCB calculations

d) ECB as branch of the Fed

First recent use after terrorist attacks in 2001

Major use in global financial crisis

Again in eurozone crisis of 2010

Standing facility October 2013

d) “Synthetic dollars” from the ECB

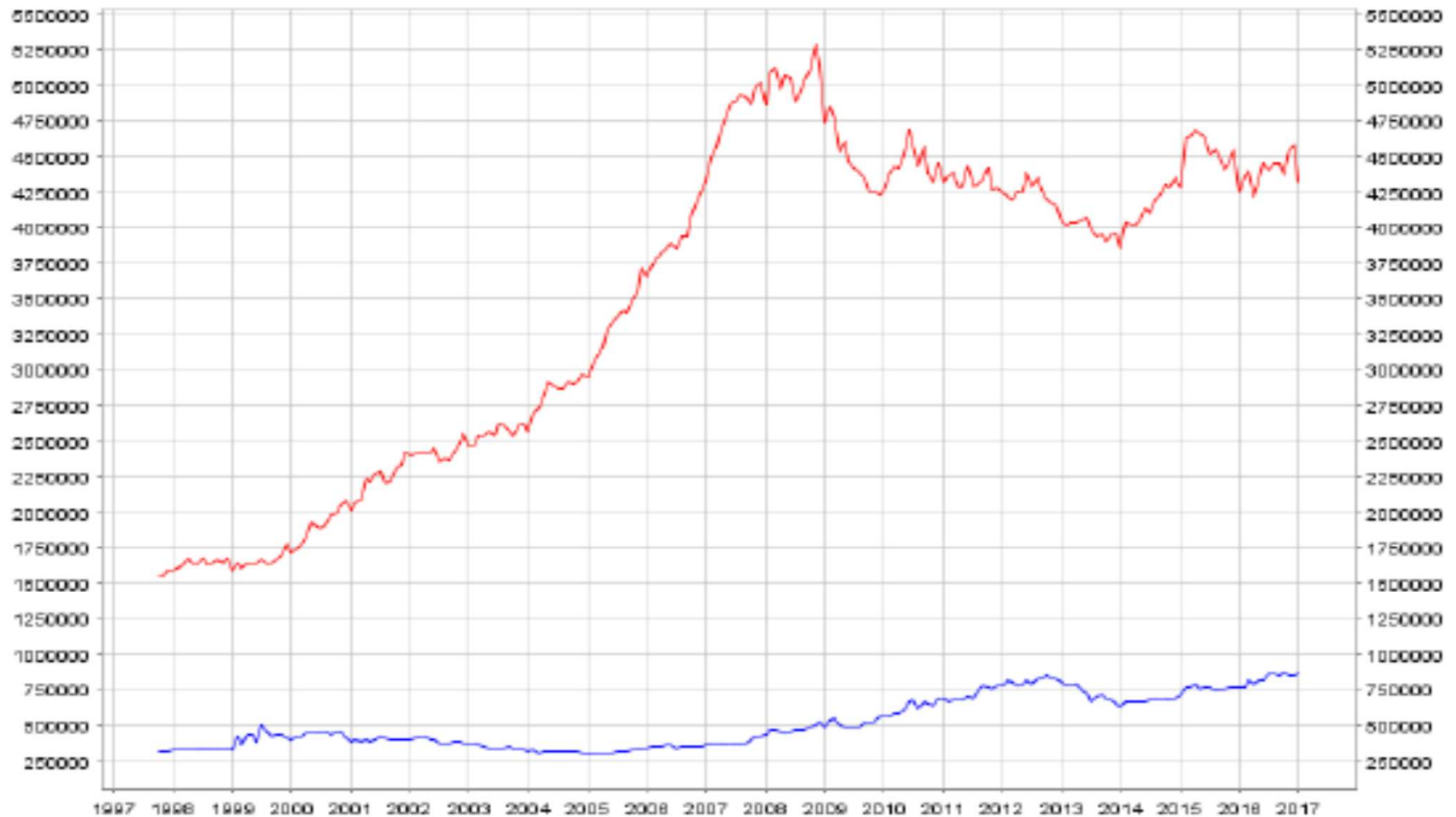
“Fed calls the shots: “In general, the issuing central bank contributes to defining the pricing terms at which liquidity is provided by the home central bank to its counterparties, in order to avoid interference with the issuing central bank’s monetary policy implementation.” (ECB, 2014, p70)

d) “synthetic dollars” – a parenthetical but interesting question

- What does the Fed do with its euros? The Japanese central bank issues a special bill – tailored to the Fed’s needs. The ECB article on the topic says nothing about this.

e) Have EU banks retreated from the US?

External assets of eurozone MFIs (and, in blue, of the eurosystem)



3. Role of public finance

“One cannot overestimate the importance of safe assets in a modern financial system. They not only serve as the bread-and-butter investment tool for pension funds and life insurance companies, or as assets-of-last-resort for the risk averse. They serve as collateral in all sorts of financial transactions. Our entire financial system relies on them.”

Muenchau, FT 2/10/17

The disappearance of safe assets

A List of Safe Assets—Pre- and Post-Crisis

	<i>Billions of US\$</i>		<i>% of world GDP</i>	
	<i>2007</i>	<i>2011</i>	<i>2007</i>	<i>2011</i>
US Federal government debt held by the public	5,136	10,692	9.2	15.8
Held by the Federal Reserve	736	1,700	1.3	2.5
Held by private investors	4,401	8,992	7.9	13.3
GSE obligations	2,910	2,023	5.2	3.0
Agency- and GSE-backed mortgage pools	4,464	6,283	8.0	9.3
Private-issue ABS	3,901	1,277	7.0	1.9
German and French government debt	2,492	3,270	4.5	4.8
Italian and Spanish government debt	2,380	3,143	4.3	4.7
Safe assets	20,548	12,262	36.9	18.1

3. Need for public finance

Two critiques of the failure to supply safe assets:

- Macroeconomic – a flight to unobtainable safe assets has a contractionary impact analogous to that of a liquidity shock (Caballero et al. 2017). If additional safe assets are not produced while their price is at an “upper bound” the effect could be long-lasting.
- Financial, the absence of safe assets impairs the functioning of the banking system and the capital markets.

3. Germany as the brake on EU bond issuance

“Eurobonds are the dream that refuse to die. No matter how often Germany rebuffs the notion of jointly issued debt, eurozone officials cannot let go. The latest iteration is European safe assets, a fixed income instrument to compete with US Treasuries. It is likely to receive as frosty a reception as its predecessors.”

3. Collateral shortage

Shortage of high quality liquid assets has become a persistent feature of eurozone credit markets.

The dramatic events at the end of December 2016 are due to technical factors (accounting practices and regulatory requirements) but they indicate the degree of stress. Hill (2017):

3. Hill on the repo market crisis

Interest rates hitting -8% (anecdotally -20%) at year-end 2016

“ there is a very real concern that the market behaviour over the 2016 year-end is not a ‘one-off’ event, and could herald the start of a new normal.”

3. Repo market crisis

Link to swap market and basis spread:

“The factors driving this break-down are multiple, and very much acted in confluence to precipitate the perfect storm. A shortage of readily available HQLA as a result of quantitative easing and the reluctance, or lack of capacity, of banks to provide year-end funding liquidity are key contributors, while market positioning, both in government bonds and currency basis, accentuated the pressures.”

3. Repo market crisis – role of Buba

“.... A number of participants cite the fact that with respect to sourcing German government bonds, the primary source was the Bundesbank (rather than the ECB, who only holds around 10% of the overall PSPP purchases). This requires counterparties having a credit line with the Bundesbank in the event of failing, the penalties are highly punitive, both economically and reputationally. As one dealer stated, on balance it was preferable to fail to your best client rather than to go to the Bundesbank.”

3 Public credit as basis of private credit: historical precedents

- Bank of England – credit for government strengthens system as a whole.
- Birth of the US – Hamilton’s triumph over Madison leads to successful issue of US bonds.
- Aftermath of WWII – banking and credit systems saturated with government debt – era of unprecedented stability;

4. Loss of EU autonomy

The standard notion of a trilemma on policy autonomy; to achieve autonomy countries must either float their exchange rates or control capital flows.

In practice this may not be an accurate account of the situation.

4. Loss of autonomy

Hélène Rey argues that the global financial cycle is so powerful that monetary conditions are determined by it even in countries with floating exchange rates.

Thomasberger made a closely related argument about the EMS and its crisis.

4. Loss of autonomy: Rey (2013)

- “Whenever capital is freely mobile, the global financial cycle constrains national monetary policies regardless of the exchange rate regime. For the past few decades, international macroeconomics has postulated the “trilemma”: with free capital mobility, independent monetary policies are feasible if and only if exchange rates are floating. *The global financial cycle transforms the trilemma into a “dilemma” or an “irreconcilable duo”: independent monetary policies are possible if and only if the capital account is managed.*”

4. Loss of autonomy: “only” 5%

The issue here is the extent to which this reasoning is applicable to the eurozone. The ECB (2017) claims that it only applies to a limited extent: the effectiveness of ECB monetary policy is less than 5% reduced (p8).

5. References

- Berrospide, J, Correa, R., Goldberg, L. and Niepmann, F. (2016). “International Banking and Cross-Border Effects of Regulation: Lessons from the United States,” *International Finance Discussion Papers* 1180
- Borio, C., McCauley, R. and McGuire, P. (2017) “FX swaps and forwards: missing global debt?”, *BIS Quarterly Review*, September, pp 37-54
- Caballero, R. J., Farhi, E. and Gourinchas, P.-O. (2017) “The Safe Assets Shortage Conundrum”, *Journal of Economic Perspectives*, 31, 3, Summer, pp 29-46
- Garcia de Andoain, C., Hoffmann, P. and Manganelli, S. (2014) “Fragmentation in the Euro Overnight Money Market”, ECB Working Paper 1755, December.
- ECB (2014) “Experience with Foreign Currency, Liquidity-providing central bank swaps”, *ECB Monthly Bulletin*, pp 65-82
- ECB (2017) *The International Role of the Euro*, July
- Hill, A. (2017) “Closed for Business: A post-mortem of the European repo market break-down over the 2016 year-end”, ICMA, February
- House of Lords (2015) “The post-crisis EU financial regulatory framework: do the pieces fit?”, European Union Committee, 5th Report of Session 2014-15, Stationary Office, London
- Rey, H. (2013), “Dilemma not Trilemma: the Global Financial cycle and Monetary Policy Independence”, in *Economic Policy Symposium, Jackson Hole: Proceedings*, pp. 286-333.
- Thomasberger, C. (1993) *Europäische Währungsintegration und globale Währungskonkurrenz*, J.C.B. Mohr (Paul Siebeck) , Tübingen.