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Macro Skinny J.P.Morgan

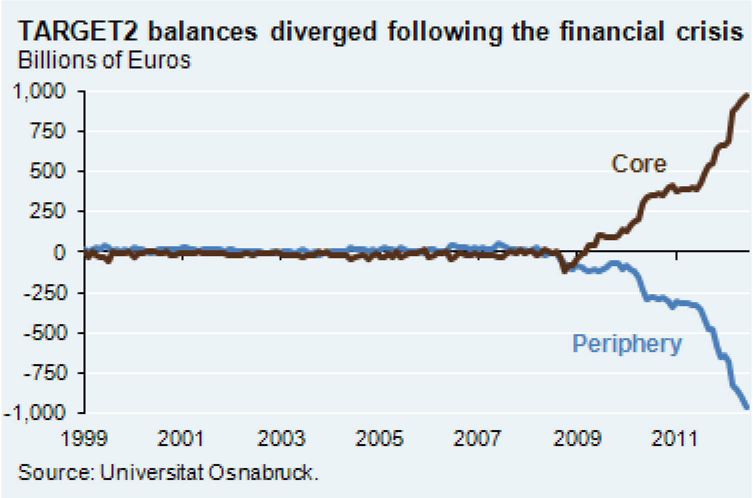
A non-technical primer on TARGET2

What is TARGET2?
Allowing 10,000 monetary financial institutions (MFIs) in the euro area to transact with each other on a bilateral basis would be a mess - it would give rise to 50 million different transaction routes! So like in the airline industry, it makes more sense to route transactions through a system of hubs: a 'main hub' connected to 17 national hubs (the national central banks), which are in turn, each connected to the local banking system. TARGET2 is the 'main hub' in the euro area payment system. If a Spanish resident buys a BMW or German stocks, the payment will be routed from his local Spanish bank account to the Bank of Spain, then to TARGET2 (the main hub), then to the Bundesbank and finally to the German resident's local bank account[1].

Admittedly, every cross-border transaction stretches over three "connections" (TARGET2, plus the two central banks). However, TARGET2 is essential as it fulfills several important functions. **First**, it routes transactions more efficiently, which helps lower transaction costs. **Second**, it allows for better monitoring. Thus, helping to regulate and protect the payment system from systemic risks and fraud. **Third**, it functions as a "meter" for measuring the net flows of payments between each euro area member and the rest of the Eurosystem.

How does TARGET2 relate to the European crisis?
It is this third capability of TARGET2 that makes it so interesting in the context of the European crisis. Not unlike the way an electricity meter measures the net flow of electricity between one European country and the rest of the European grid – TARGET2 balances sometimes show a deficit, and sometimes a surplus. A TARGET2 deficit arises when the outflow of euros (payments from buying goods and assets from other euro area members) is greater than the inflow of euros (receipts from selling goods and assets to other members). Because TARGET2 is the main hub connecting all the central banks, each country's deficit or surplus is with respect to TARGET2, not against a specific country. By definition, the sum of all the euro members' TARGET2 balances is zero.

Between 1999 and 2007 the periphery sold a large amount of domestic assets to core countries, for which they received significant euro *inflows*. Against these, they aggressively imported goods from the core countries, which resulted in a similar amount of *outflows*. TARGET2 was thus balanced at the time, but for the wrong reason – while a lot of German money was flowing in, the periphery spent it on excessive consumption of German goods. From 2007 onward, German investors were anxious to sell their periphery assets, which resulted in a massive outflow of money. Since periphery countries were never very good at exporting, they could not generate enough export-related inflows to counterbalance the outflows. This is when the TARGET2 deficits in the periphery appeared. The flip side of this, of course, is a massive TARGET2 surplus in Germany and the rest of the core (first chart).



TARGET2 deficits: a form of debt

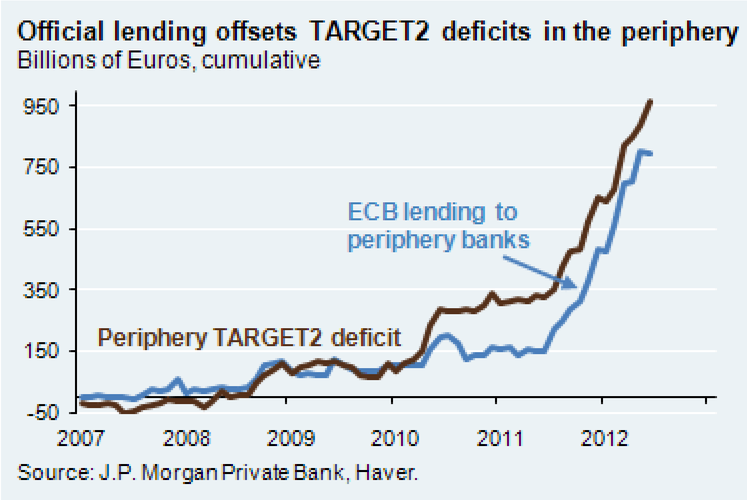
Each central bank in the Eurozone is responsible for printing euros solely for the purpose of its domestic economy. So 'normally', only the currency created by the Bundesbank should be circulated in Germany – no more, no less. But the situation today is clearly not 'normal' - Germany is running a TARGET2 surplus because it has been aggressively selling periphery assets in exchange for euros, which were created in Spain[2].

One could argue that Germany is now satisfied as it recovered most of its investment money from the periphery, but this is a misguided assertion; Germany may have more euros, but what good will they do if the new money chases the same amount of local goods, services and assets *in Germany*? This will only result in higher inflation in goods, services and assets, but it will not increase in the amount of real assets or real consumption. To make the Germans better off, these euros need to purchase goods, services and assets in the rest of the Eurozone.

Thus, we should think of Germany's TARGET2 surplus as "reserves" to be spent in the rest of the Eurozone, in much the same way that China's dollar reserves are only useful if they are spent in the United States. Likewise, we should think of Spain's TARGET2 deficit as a debt to the Eurosystem. The foreigners (mostly Germans) who own 'Spanish euros' will come back to Spain at some point and claim goods and services in Spain, or "eat some of the Spanish GDP cake". Spain's TARGET2 deficit is really a deficit of "reserves."

The link between TARGET2 and LTROs

With the migration of Spanish euros to Germany, haven't the Spanish banks run out of euros by now? No. Recognizing the leakage of euros (using TARGET2 as its meter), the ECB launched a series of extraordinary monetary policy operations[3] to replenish the stock of money in the periphery. In Spain, for example, LTROs represent newly created money by the Bank of Spain that is being lent to the Spanish banks. Indeed, official lending to periphery banks has almost exactly offset the TARGET2 deficits in the periphery (second chart). The result is a broadly stable supply of money in the periphery (the newly created money offsets the outflow of money to the core countries), but a sharp rise in the supply of money in the core.



The end game for TARGET2

In the event of a euro breakup, the periphery countries will return to their local currency systems (peseta, lira, drachma etc.). These currencies will likely trade significantly cheaper to the euro, which means that the periphery's TARGET2 deficit automatically becomes a hard currency debt problem and a lot heavier in Peseta or Lira terms, with an increasing likelihood of a partial default on the TARGET2 debt. From the perspective of Germany, this can be seen as the direct cost of a euro breakup.

On the other hand, if the euro doesn't break (our baseline scenario), the divergence in TARGET2 balances will continue and more LTROs will be offered to compensate for the outflow of money from the periphery. This process will end when German investors have taken most of their money back – roughly 2-3 years from now. The hope is that at that time, the periphery will become a lot more competitive relative to the core countries, in which case, 'periphery euros' will return back to the periphery and the TARGET2 deficits will gradually close. The flip side of this last point: the Germans will finally realize the value of the 'periphery euros' they currently own by importing more goods and services from periphery countries.

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[1] Unless, of course, the money flows across the border as cash in a suitcase.
[2] Strictly speaking, Spanish euros are not allowed to cross into Germany. Instead, those Spanish euros get destroyed at the Bank of Spain, while at the same time the Bundesbank creates new German euros of an equal amount.
[3] 3-year LTROs for banks with eligible collateral and ELA for banks without it.

Acronyms:
BMW – Bayerische Motoren Werke
ECB – European Central Bank
ELA – Emergency Liquidity Assistance
LTROs – Long-Term Refinancing Operations
TARGET – Trans-european Automated Real-time Gross settlement Express Transfer system

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