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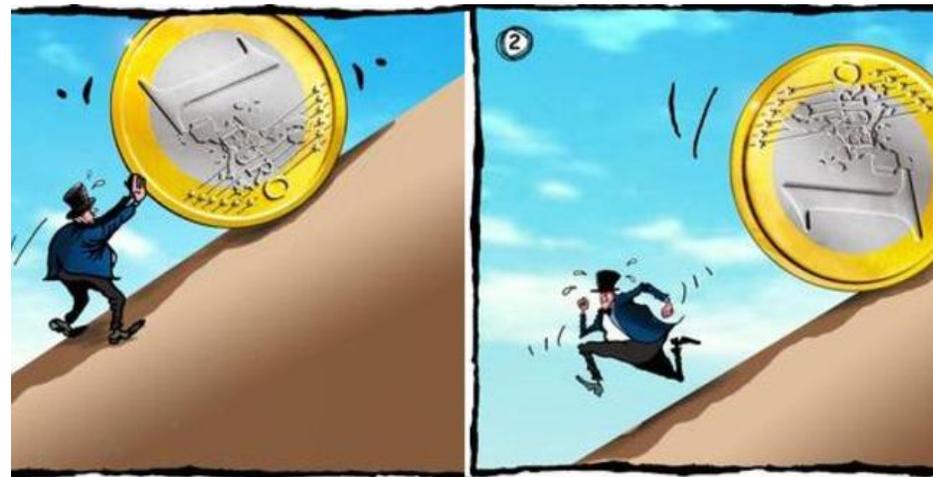
*Economic Institute of the NBP*

## **Reflections on the euro crisis: prioritizing the road ahead**

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USC and the NBER

*"The crisis takes a much longer time coming than you think, and then it happens much faster than you would have thought."  
Rudi Dornbusch, Professor of Economics, MIT, 1942 – 2002*



## Overview

- The euro faces structural and financial distortions.
- While both distortions are costly and prevalent, they differ in fundamental ways.
- Financial distortions are moving at the speed of the internet, and their welfare costs are determined by the access to credit lines and leverage.
- The structural distortions are moving at a slow pace relative to the financial distortions. Their damaging effects are linked to the factors determining the GDP.
- **Conclusions: priority should be given to dealing with the financial distortions. The structural distortions may be dealt with more fully down the road, once the euro gains greater financial stability.**

## **Presentation Plan:**

Overview of structural and financial distortions in the euro zone.  
Discussion of differential growth rates.  
Lessons from history: comparison between the US and the Euro zone.  
The road ahead.

# Background

- The debate concerning the root causes of the crisis goes on.
- Pundits agree that the status quo is unsustainable, but the road ahead remains unclear.
- The limited political capital of the euro's leaders should be used by targeting the most important reforms first.
- Which are the most critical distortions that should be fixed first?

**Using the logic of market forces and political economy constraints, we argue that not all distortions are alike.**

**Taking broad strokes, we divide the distortions affecting the euro into two-groups -- the structural and the financial.**

## **Structural versus financial distortions**

- **Structural distortions:**
  - labor and product market anomalies,
  - providing ample protection for incumbents while imposing barriers to entry of new comers,
  - inhibiting and stifling growth,
  - reducing the GDP/Capita below its full potential, etc.

## Manifestations of the structural distortions of the euro

- The rigid labor market,
- Overprotecting the older workers at a growing cost to the younger workers and to the economy.
- Limited product and service market competition, barriers to entry, and the like.

The differential depth of the structural distortions in the Eurozone has been associated with divergent economic development between the northern and the southern euro states, and has been exemplified by the differential real exchange and growth trends between the GIIPS and Germany.

## The financial distortions:

- the lack of a banking union and unified resolution procedures dealing with insolvent banks;
- the too close affinity between the sovereign state and its banking system,
- the absence of credible and well-funded deposit insurance scheme supporting the euro banking system, etc.

**Both distortion types are costly and prevalent, yet they differ in fundamental ways.**

- Financial distortions are moving at the speed of the internet, their welfare costs are determined more by the access to credit lines and leverage, than by the GDP of each country.

- The structural distortions are moving at a glacial speed relative to the financial distortions, and their effects are determined by inter-generational dynamics. Unlike financial distortions, the damaging effects of the structural distortions are linked directly to the factors determining the GDP – the labor force, population, and the stock of productive capital.

## Conclusions

The priority should be given to dealing urgently with the financial distortions, while the structural distortions may be dealt more fully down the road, once the euro gains greater financial stability. Urgency should be given to the formation of a euro wide deposit insurance, the soundness of which is based on granting it the proper regulatory power, and the capacity to charge the needed risk premia.

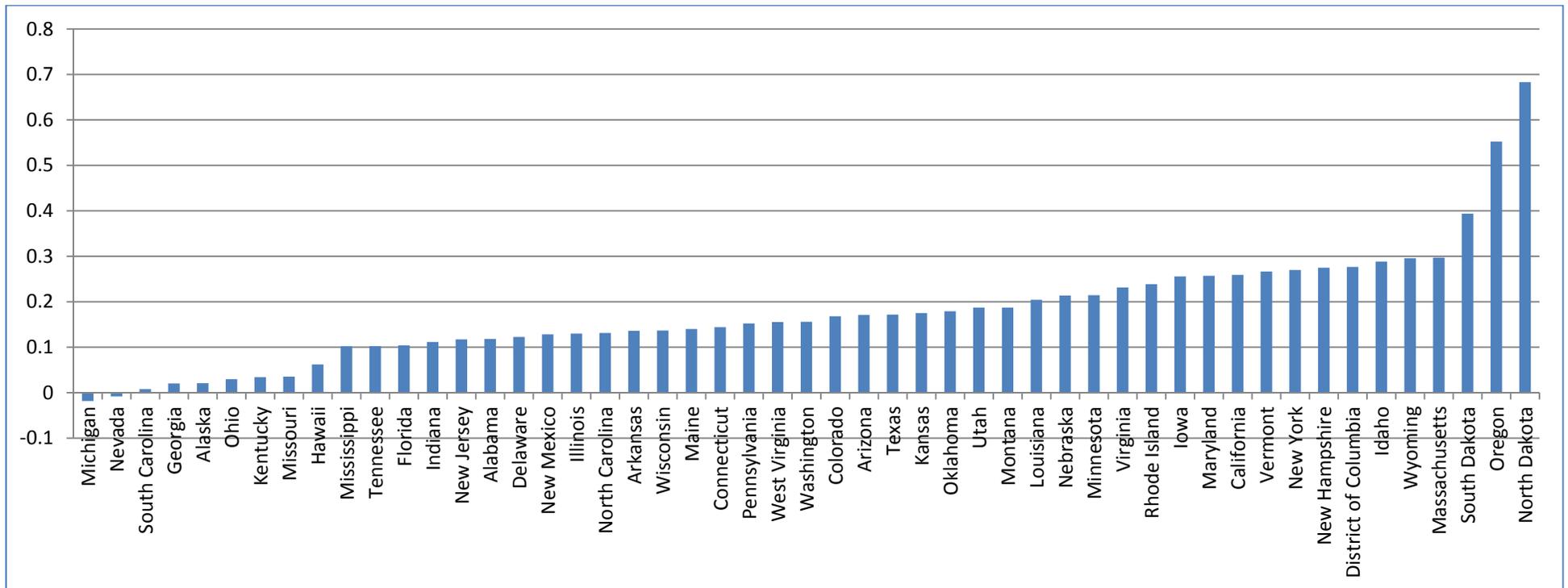
**Are these differential growth trends the root cause of the euro crisis? Not really -- it is the interaction between these trends and the incomplete financial design of the euro project.**

Similar divergent economic developments between states in other currency unions have not been associated with crises threatening the stability of the union.

**Example -- the differential growth trends of the 50 US States. Look at the per capita real GDP changes, 1997-2011.**

- During that period, the per capita real GDP of the best performing three states grew by 54%, while the bottom three by 0%.
- The gap between the per capita real GDP of these groups has diverged at about 4% annually during more than a decade.

Conclusion: the divergent growth trends of the 50 US states may be comparable to that of the euro block.



**Per capita real GDP change, 1997-2011, by state (chained 2005 dollars)**

**Date source: Bureau of Economic Analysis**

$[(\text{Per capita real GDP 2011} - \text{Per capita real GDP 1997}) / \text{Per capita real GDP 1997}]$

## **Unlike the euro, there is no existential crisis in the US union.**

The reason for the relative stability of the US union, despite the divergent growth patterns among the 50 US States, include:

The US is a mature union - the US had more than 200 years to move towards “a more perfect union.”

The US painfully matured into a union with:

1. Significant stabilizing tax-cum-transfer system via the federal fiscal center.
2. A strong banking union with centralized deposit insurance and banking resolution.
3. Labor mobility, etc.

**In contrast, the euro is the opposite of all the above**

A shallow currency union among advanced welfare states,

- 1.No banking union.
- 2.No fiscal union.
- 3.Strong links between national banks and the sovereign.
- 4.Limited labor mobility.

**The formation of the euro is akin to a Bungy jump without a rope, with the need to use parachutes and bailouts to prevent the crash.**



## **Is this a too harsh assessment of the euro, reflecting *ex-post* wisdom? Were the fault lines of the euro project expected?**

The key fault lines of the euro were identified in the years leading to its formation.

See Jonung and Drea (2010), who document with a touch of humor the earlier concerns of (mostly) US economists about the probable instability of the euro.

This prediction turned out to take about ten years to materialize.

## **Was the ‘stability’ of the Euro project during its first decade expected?**

No, the length of the honeymoon of the euro surprised most of the economists who were initially skeptical regarding the euro. Presently, the euro project faces grave risks if urgent modifications will not take place.

## **The fundamental reasons for the looming risks**

The deepening financial integration of the euro states, coupled with the under-regulation of the banking system and the absence of a tight banking union, provides ample opportunities for mischiefs and financial instability.

## Financial vulnerabilities are magnified by agency problems:

Exposure to moral hazard associated with the belief that the euro project is too big, and politically too important, to fail.

The limited liability and the limited 'skin in the game' of the banking system encourages ignoring tail risks.

The sector that is the fastest in exploiting perceived financial opportunities is the banking and the financial system --  
The financial system lives by, and dies by arbitrage at the speed of the internet [see Admati and Hellwig (2013)].



## **Generic feature of financial integration [Aizenman (2004)]**

In the era of financial integration, the scale of financial rents in good times and the costly bailouts in bad times are determined by access to funds, credit and leverage, and are magnified by under regulation -- factors that possibly are delinked from the actual size of the economy.

**Examples: Iceland, Cypress and Ireland.** Banks' profits in good times were private, yet banks' losses were socialized, saddling taxpayers with huge liabilities, transmitting a banking crisis into a fiscal crisis.

The absence of a banking union in the euro, the under regulation of banks coupled with the underpricing of sovereign risk during the first ten years of the euro, all magnified the ultimate exposure of the euro countries to downside risks.

**Labor and product markets distortions and inefficiencies matter a lot in explaining low growth and poverty.**

Yet, as long as the financial regulations are tight, possibly by means of stifling financial repression and capital controls, real distortions do not lead to financial crises.

Examples: the record of India and other developing countries in the 1960s – prevalence of poverty, tepid growth, financial repression, and the absence of financial crises.

**In contrast to the euro experience, in a well-functioning banking union, stagnating states in a vibrant union are not a threat to the union.**

Illinois is in a fiscal mess. South Carolina stagnates, yet there is no banking crisis there.

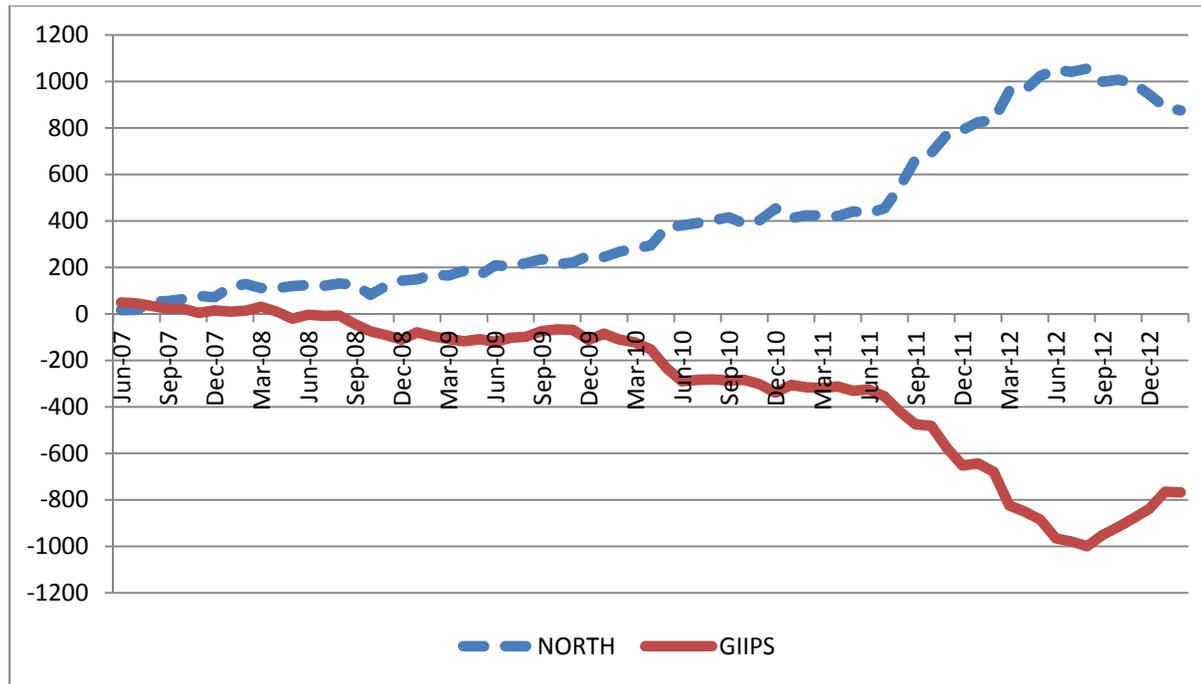
Spain and Ireland were in a much better fiscal position in 2007-8 than Illinois and California during that time, yet they were doomed to be exposed to a massive banking crisis, and a massive fiscal crisis.

A well-functioning banking union may be exposed to a deep banking crisis due to under-regulation and ignoring tail risks, *without imposing an existential threat to the union*, as has been the case in the US during the last five years.

The reason: the risk pooling associated with a banking union, where union level deposit insurance, funded by proper risk assessments, mitigates bank runs and provides down the road the needed funding for bailing out consumers, and allowing for a more proper resolution and liquidation of insolvent banks.

## **A puzzle: If financial arbitrage is fast, how did the euro survived so far?**

- A probable answer: through the massive implicit bailout of the ECB, acting as the agent whose big finger in the leaking financial dyke has prevented the euro's collapse. This has been manifested in the TARGET2 imbalances.
- To recall, TARGET2 is a settlement system that clears payments between the regional Central Banks in the Eurozone.
- As of July 2007, the net TARGET2 balance of Northern euro [Germany, Holland, Luxemburg and Finland] and of the GIIPS were close to zero.
- By Feb 2013, the net credit of the TARGET2 balance of Northern euro increased to about 800 Billion euro (reflecting mostly Germany's exposure), while the net balance of the GIIPS was a debit of about 800 Billion euros.



**Net TARGET2 balance, bn € .Northern euro, [Germany, Holland, Luxemburg and Finland] and of the GIIPS.**

**Data source: Euro Crisis Monitor [Institute of Empirical Economic Research](#), Osnabrück University**

The gap between the two curve: a proxy for the capital losses of the Northern euro states if the euro would unravel in a disorderly manner.

***If you owe a bank thousands, you have a problem; owe a bank billions, the bank has a problem.*** (D. Trump),

- In the euro, the ultimate stake holders of “the bank” are the northern taxpayers.
- Ironically, the ECB provided *de facto* the bailout of the banking system of the periphery, thereby mitigating the run on the banking system there, as is the classical role of deposit insurance.
- Nevertheless, the incompleteness on the euro project prevents the euro-system from reaping the full benefits of stabilization and coordination associated with of a well-functioning banking union.

## **Dynamics of financial crises, and the perils of weak currency unions**

*"The crisis takes a much longer time coming than you think, and then it happens much faster than you would have thought." (R. D.)*

This quotation applies to most financial crises.

It goes back to his reflections on the Mexican crisis of 1994-5 [aka the Tequila crisis] -- the first modern financial crisis inflicting emerging markets following their financial liberalization in the early 1990s.

It was followed by a long sequence of financial meltdowns, hitting East Asia, Russia, Brazil, Argentina, and more recently the global and the euro crises.

**The statement summarizes the tendency to ignore tail risks, risks that frequently are underweighted in the economic decision making, allowing distortions to ripe over long periods, longer than the Cassandras of the day expected.**

Yet, once the tail risk materializes, things tend to unravel fast, at an accelerating speed.

In this vein,

- The global crisis of 2008-9 is the delayed but predicted reaction to the massive financial liberalization and under-regulation trends going back to the 1980s.
- The euro crisis is the delayed reaction to the fault lines of the euro.

**Clarification:** '*predicted crisis*' deals not with the timing, but with identifying the fault lines causing the ultimate fracture. Generically, we are clumsy at predicting the timing of financial crises.

**This is not due to a lack of talent or effort, but to the logic of market forces.**

If you can predict the timing of a future crisis, you can earn a massive rent. The attempt to exploit this prediction may trigger a crisis, thereby destroying the initial prediction.

## **Financial Markets are subject to forces that may lead to multiple equilibria.**

The euro gained credibility during its first ten years, probably due to the Great Moderation and the presumption that the euro project is too big and politically too important to fail.

The growing credibility of the euro induced an attitude of Happy-Go-Lucky, a complacency of the market and policy makers, and probably brought a deeper crisis when the tail risk was realized.

**Putting the euro crisis in economic perspective**, the skeptical viewers of the euro noted that, in contrast to the gains from the EU, economic gains of the euro are minor, and they come with a large exposure to downside risks.

The Euro project is mostly a political venture, explained by the complex history of Europe during the 20th Century.

**The design of the euro and the Maastricht treaty was incomplete, as was the design of the US union in 1776.**

The formation of the euro is an example of a common Panglossian attitude to policies – an upbeat optimism helps in galvanizing the political support.

- The hope is that the formation of a currency union (like the euro) may lead to dynamic forces inducing ‘ever closer union’ [Hass, 1958], as the processes of market integration and cooperation do mutually reinforce each other.
- This approach reflects an optimistic assessment of the ‘bicycle theory’ of unions (Moravcsik, 2005), and the ‘Endogenous OCA Theory’ (Frankel and Rose, 1997).

## **Panglossian attitude to policies may reflect built-in fiscal myopia**

- Individual fiscal myopia reflects hyperbolic discounting: present-biased consumer excessively discounts future consumption relative to the conventional expected utility (Leibson, 1997).

Adjustment is delayed to “Tomorrow, but tomorrow never comes.

- Policy maker’s fiscal myopia may reflect the short-termism associated with a limited time in office, and the possible short - sightedness of hyperbolic discounting voters.
- Proper institutions may help, but forming these institutions may require painful learning.

The limited horizon of the principal [the “empire builder”] and the agents [states, citizens] may help at the stages of nation

building, but down the road it requires rapid adaptation to the evolving challenges of the day.

- The original fiscal sin of the euro is assessing and measuring fiscal exposure by Public debt/GDP instead of by the by Public debt/average tax revenue.
- De facto fiscal space is much better measured by  
The public debt/average tax base (stock)  
The fiscal deficit/average tax base (flow).

Aizenman, Hutchison and Jinjarak, 2013

- A key macro variable accounting for sovereign spreads:

***de facto* fiscal space = public debt/average tax base.**

Superior to the public debt/GDP; used in the Maastricht Treaty, public debt/GDP < 60%.

## Example: Fiscal space of Austria versus Panama, 2005

2005	Public Debt	Tax	Public Debt	Fiscal Balance	Fiscal Balance
	GDP	GDP	Tax	GDP	Tax
Panama	63%	<b>10%</b>	6.3		
Austria	64%	<b>44%</b>	1.5		
Poland		<b>33%</b>		-2.9	<b>-0.09</b>
Philippines		<b>13%</b>		-2.7	<b>-0.21</b>

A key finding: a higher public debt/tax base is associated with a sizably larger sovereign risk

## **Do all these challenges imply the coming end of the Euro?**

Not-necessarily, while the formation of the euro might have been a mistake, unwinding it today may also be a mistake. As long as the Eurozone core states [Germany, Holland, France, etc.] are willing to push it, and to bank the euro project in the short-run, it will mature and survive, though in a different form. Yet, 'never-say-never,' as predicting political-will is hazardous.

## **On the political economy of the crisis -- “How long will it take to reform the euro?”; “How will it happen?”**

Insight can be gained by looking at the history of the US union. The banking union in the US, and the formation of the FDIC [Federal Deposit Insurance Corporation] were the outcome of the Great Depression.

It took more than 150 years of financial instability in the US, with numerous banking crises, to lead to the formation of the FDIC in 1933.

Yet, things are moving much faster today: it will take less time for the euro to upgrade itself, or to collapse (faster arbitrage forces are at work).

Ironically, the rapidly growing exposure of Northern states to the indebtedness of the Southern states in the Eurozone may provide the impetus for deep financial reforms of the euro project.

## **Greater financial stability may come by moving fast towards a banking union,**

Forming a Eurozone institution akin the FDIC, buffered by the risk premia and regulations needed to provide effective deposit insurance. US history suggests that the funding costs of these services in the long-run are well below 0.5 % of the GDP, a cost that may be more acceptable politically in euro today than euro's debt mutualization.

Down the road, a banking union will require cutting the links between the sovereign states in the euro and their banking system, so that the stability of the banking system will be de-linked from the fiscal stability of the state [see Pisani-Ferry (2012)].

## How to reform?

### No pain – no gain

“You never let a serious crisis go to waste, it's an opportunity to do things you think you could not do before.” R. Emanuel

Crises generate creative destruction, re-shuffling bargaining clouts, changing positions and alliances.

With luck and political skill, crises may induce learning by doing, as more of the bad options are eliminated.



**FDIC -- a good case study of such dynamics.  
The Great Depression unleashed forces that led to a banking union, an outcome that was opposed to by the majority in the US congress for more than a hundred years of banking instability.**

*“By the mid-1920s, all of the state insurance programs were in difficulty, and by the early 1930 none remained in operation. Consequently, 150 proposals for deposit insurance or guaranty were introduced into Congress between 1886 and 1933. The basic principles of the federal deposit insurance system were developed in these bills and in the experience of the various states that adopted insurance programs. These principles included financing the federal deposit insurance fund through assessments; the use of rigorous bank examination and supervision to limit the exposure of the fund; and other elements, such as standards for failed-bank payoffs and liquidations, intended to minimise the economic disruptions caused by bank failures.”*

FDIC (1998) “A Brief History of Deposit Insurance in the United States”.

## **How did the US union survive without a banking union for about 150 years? Does it suggest that the euro union can survive without a banking union?**

Probably not, as the US union moved early on in its history towards debt mutualization, buffered by the needed taxes as part of the Hamiltonian resolution of serving the debt associated with the American Revolutionary War (1775–1783).

Key elements of Hamilton's scheme:

Converting outstanding federal and state debt obligations into long-term bonds and creating credible mechanisms to service and amortize this debt. A sinking fund was created, setting aside in 1795 explicit revenues to be devoted to the fund: part of import duties, excise taxes on alcohol and other levies, and the sale of public lands.

## **The next major institutional building in the US happened after the defaults of 8 states in 1842.**

This massive sovereign default -- after decades of economic boom, when states created and expanded their transportation infrastructure, relying deeply on debt financing.

In response, states' constitutions in the 1840s created procedures requiring state governments to raise taxes before they borrowed, and made those taxes irrevocable until the debt had been repaid.

**Wallis (2005)** attributes the success and the stability of the US dollar union to these institutional changes: *“After the fiscal crisis of the early 1840s, states changed their constitutions to eliminate taxless finance in the future.”*

The combination of debt mutualization and restraints on states' borrowing probably explains the ability of the US Union to delay the formation of a Banking Union. In contrast, at present there is no political will in the Eurozone to move fast towards debt

mutualization, or towards deep fiscal reforms linking sovereign borrowing to future tax commitments.

**Following these changes in the Eurozone will help in stabilizing the euro. These reforms require hefty political support, lacking so far in the Eurozone.**

**Looking forward**, the growing exposure of the core of the euro to capital losses associated with the disorderly melt down of the euro project provides a ray of hope regarding the future.

Growing recognition of the increasing costs of breaking the euro probably explains Merkel's changing her position, supporting Draghi's aggressive policy of "doing what it takes" to save the euro, against the views of Deutsche Bundesbank's President Weidmann.

It may also account for the growing willingness of Germany to move towards a banking union. *De facto* Draghi's policies stopped the accelerated run on GIIPS banking systems.

Yet, this happened before putting in place the structure that would buffer the balance sheet of the agencies funding these bailouts.

Had euro's FDIC been in place and running from day one of the euro, with the capacity to regulate, to charge risk premium, and to liquidate insolvent banks, fiscally sound countries prior to the crisis would have remained in a much stronger fiscal position today.

**Conclusion:** As long as the key stake holders are willing to push the euro project and to fund bailouts in the short run, they will be able to push the reform agenda forward.



**Dzięki za uwagę**

**Dzięki za uwagę**

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