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The cost benefits and potential drawbacks of the "Leaning Against the Wind'' approach in terms of increasing Effectiveness of Macro-prudential Policy for preventing financial crisis and promoting financial stability.

Les avantages et les inconvénients de l'approche « Leaning Against the Wind » en termes d'augmentation de l'efficacité de la politique Macro-prudentielle pour prévenir la crise financière et promouvoir la stabilité financière.

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Abstract:

We study in this paper the benefits of adopting the approach of LAW (Leaning Against the Wind) in monetary policy amid Central banks especially in the context of Macroprudential policy to prevent any systemic risk tending to impact financial stability, we also demonstrate the potential limits and disadvantages of the LAW approach for certain cases, the study investigates whether the approach is wisdom enough to be considered in monetary policy that reacts to perceive financial imbalances such as excess credit growth.

This research paper will also demonstrate the vital role and the main target of adopting a strong macro-prudential policy by central banks and how it can prevent financial crisis and systemic risks.

Keywords:

The effectiveness; LAW approach; Monetary policy; Systemic risk; Financial stability

Résumé:

Nous étudions dans cet article les bénéfices de l'adoption de l'approche LAW (Leaning Against the Wind) dans la politique monétaire au sein des banques centrales notamment dans le cadre de la politique macro-prudentielle pour prévenir tout risque systémique tendant à impacter la stabilité financière, nous démontrons également les limites potentielles et les inconvénients de l'approche LAW pour certains cas, l'étude examine si l'approche est suffisamment sage et mature pour être pris en compte dans la politique monétaire qui réagit afin de percevoir les déséquilibres financiers tels que la croissance excessive du crédit.

Cet article démontrera également le rôle vital et l'objectif principal de l'adoption d'une politique macroprudentielle forte par les banques centrales et comment elle peut prévenir les crises financières et les risques systémiques.

Mots-Clés :

L'efficacité; l'approche LAW; politique monétaire; risque systémique ;stabilité financière

Introduction :

The fact of whether financial stability should be implemented in any monetary policy remains an open economic debate for many decades among various ideological thoughts.

“Economic policy must reflect an ideological vision; it must be inspired by the ideals of a good society. And it is evident that we are faced with a failure of vision, with a crisis in the aims and objectives that economic policy should serve” (Hyman.P. Minsky,1989).

In fact, financial stability remains one of the most vital concerns of any economy, indeed it is an ultimate occupation for central banks and it involves a high importance and prior subject for economic policymakers.

In terms of targeting emerging risks, many policymakers believe that macroprudential policy is preferable to monetary policy because it has a lower impact on the real economy (see Yellen 2014,), furthermore adopting a strong macroprudential can lead directly to strengthening the financial system’s resilience to future crashes by buttressing the balance sheet of borrowers and lenders, something that can be hardly framed by the monetary policy (Bengui & Bianchi 2018).

Our main target of this paper is to demonstrate how can a macroprudential policy be more efficient than monetary policy when it comes the prevention of systemic risk, through a case study of “Leaning against the wind” approach, we also demonstrate its limits and drawbacks according to the last researches conducted on the same topic.

To discuss more our topic, we will try to answer to this research problem through two main questions:

- ⇒ How far the macro-prudential policy can prevent Financial crisis?
- ⇒ What is the main impact of Leaning against the wind approach on systemic risk control?

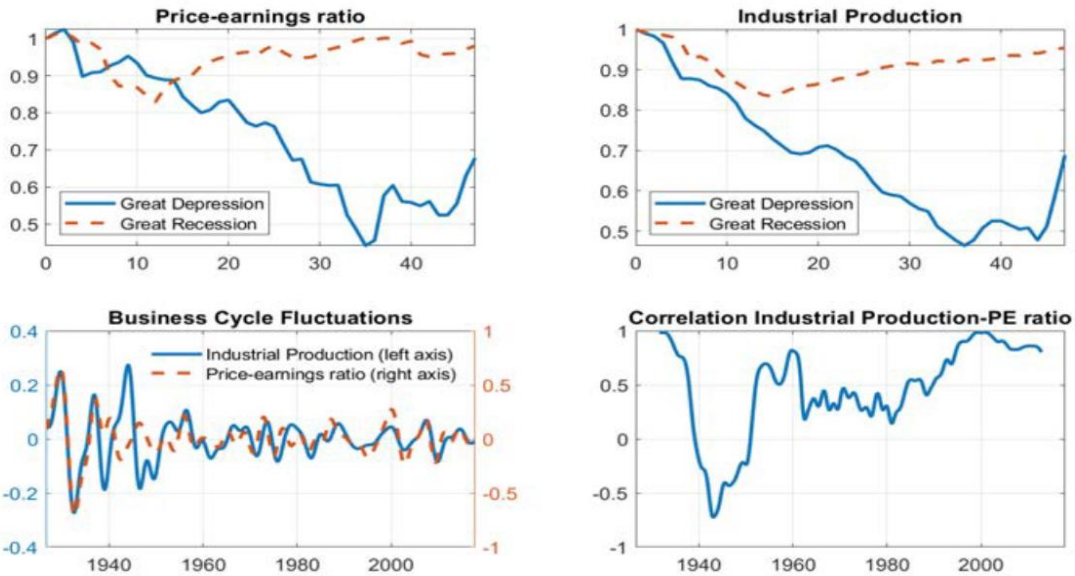
In order to answer to the questions above, our research plan will be divided into two main parts, the first part will provide a general overview on the markable period of financial crisis and it will also include some previous studies on the subject, moreover the second part will demonstrate the results.

1.Systemic Risk From the 1929 crisis to the 2008 Subprime mortgage crash.

1-1 Systemic risks leading to major world-wide financial crisis

Recession but not a depression, this was the main belief and concern of world economists after the financial crisis in 1929, Not only was income decreasing rapidly and the unemployment rate significantly increasing, but virtually each day saw another bank, financial organization, municipality, business corporation, or country declare financial difficulties (Hyman.P.Minsky,1989).

Figure 1: Stock market and real activity during the Great Depression and the Great Recession.



Source: National Bureau of Economic Research (NBER)

After the Subprime crisis of 2008 and its pervasive consequences, leading the United States economy to its largest and most severe recession since the Second World War, the beginning of the crisis started with the mortgage housing bubble that led to the massive collapse of the subprime market, after few months the phenomena became contagious and it spread to the entire Banking sector and then to the real economy.

Analysing the 1980-2008 period through these figures highlights several persistent trends characterizing the US economy before the financial crisis:

- a- A significant decrease in the wage share (fig. 1a).
- b- A steady rise in the top 10% income share (fig. 1b).
- c- An increase in households’ debt-to-income ratio (fig. 1b).
- d- A slowdown of inflation (fig. 1c).

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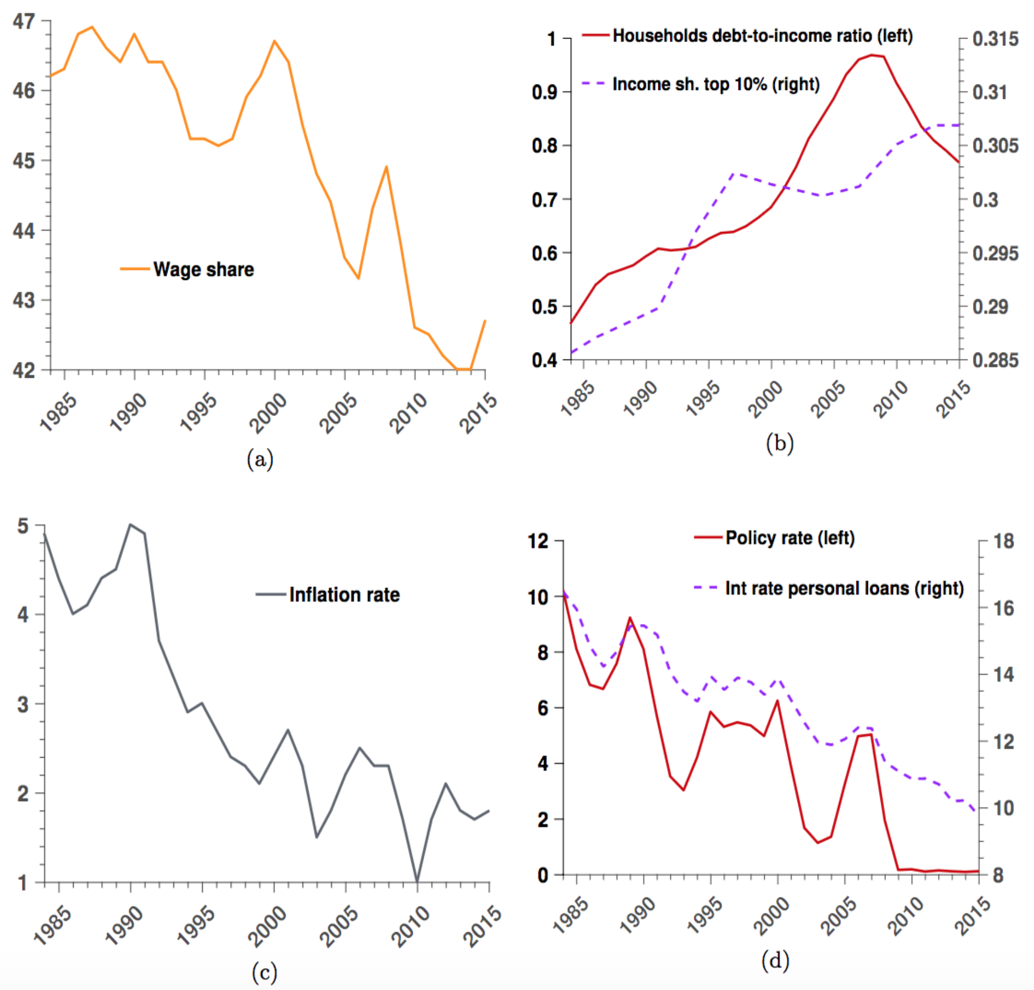


Source: Data are taken from BIS and FRED

We notice during the period between 2007 and 2010 a dramatic decrease (See Figure a) in the Wage Share in the US, while it is recognised a significant increase on Households debt-to-income ratio (see Figure b).

The inflation rate remains to fluctuate during the period between 2007-2008 to reach its lowest rate in 2010 (see Figure c), and lastly, the Policy Rate graph demonstrates a massive drop from 2007 to 2010 (see Figure d).

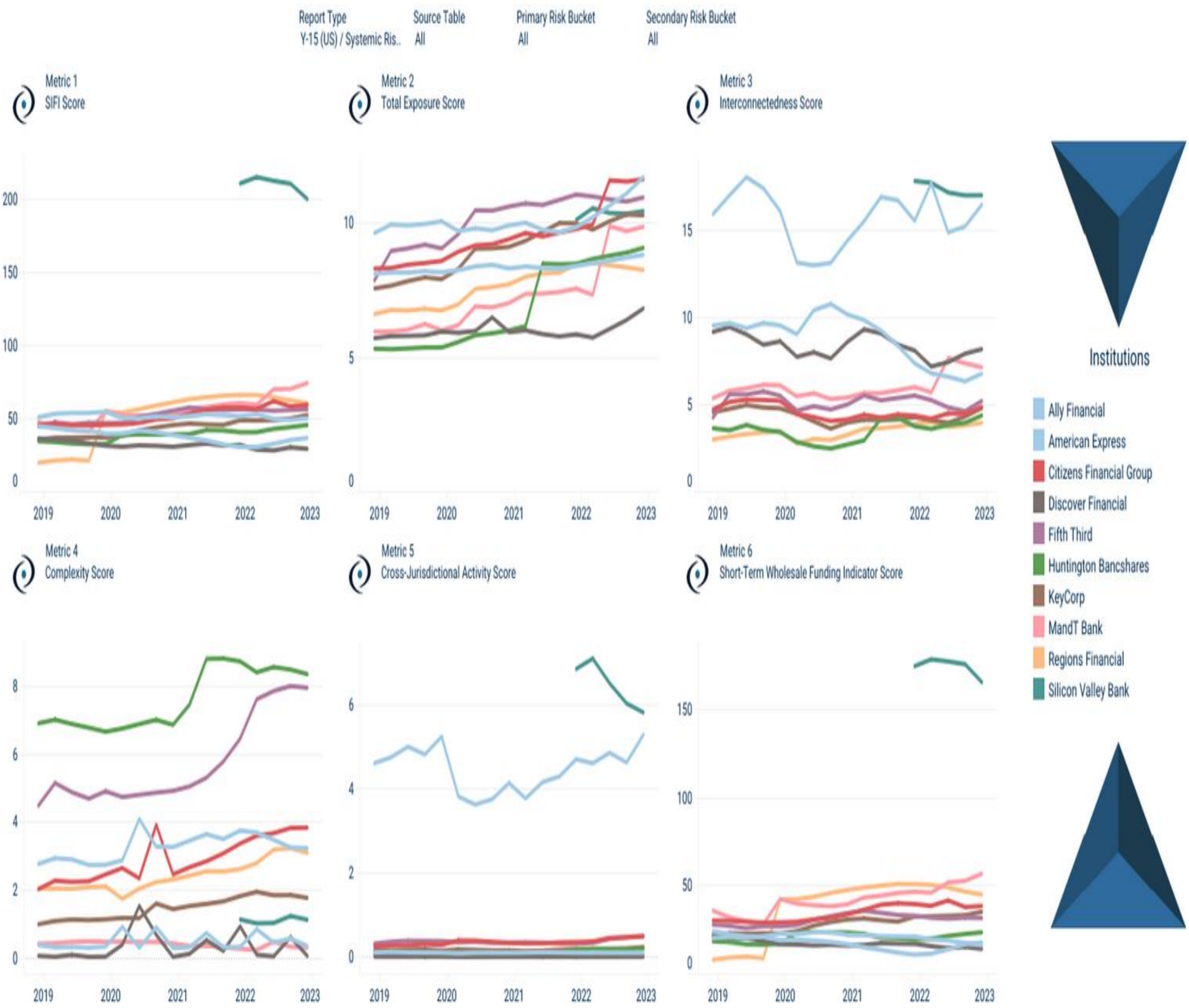
1.2-Silicon Valley Bank (SVB) collapse in 2023 and its impact on financial markets

The recent collapse of Silicon Valley Bank (SVB)induced shocks through the international financial system, raising uncertainty and fears regarding the fragility of the banking system as well as the risk of vulnerability to a more widespread financial disaster. After the Washington

Mutual Bank and Lehman Brothers Collapses in 2008, SVB tends to be the second-largest Banking failure in United States financial history, furthermore SVB has been the largest Bank run where its depositors have requested a $42 billion withdrawal in a single day.

The SVB was the systemic Bank in 2023 where the contagious effect started spreading all over the financial system affecting other institutions such as Silvergate Bank and Signature Bank continuing the impact of a new systemic risk affecting the US financial system and making the Banking system's resilience weaker.

Figure 3: Breakdown of Category IV Banks by Systemic Risk Indicator (2019-2022)



Source: GARP Pillar 3+ platform

Figure 4: Listing of Bank Systemic Risk Scores (2021-2022)

	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
SVB Financial	211	215	213	211	200
Northern Trust	177	175	171	161	154
M&T Bank	61	60	70	71	74
Regions Financial	66	66	65	63	61
Citizens Financial	58	57	62	58	60
Fifth Third	57	56	56	56	57
American Express	52	53	50	49	50
KeyCorp	49	49	49	50	53
Huntington	41	41	43	44	46
Ally Financial	31	31	33	35	37
Discover Financial	32	29	28	30	29

Source: GARP Pillar 3+ platform

2.Presentation and study methodology

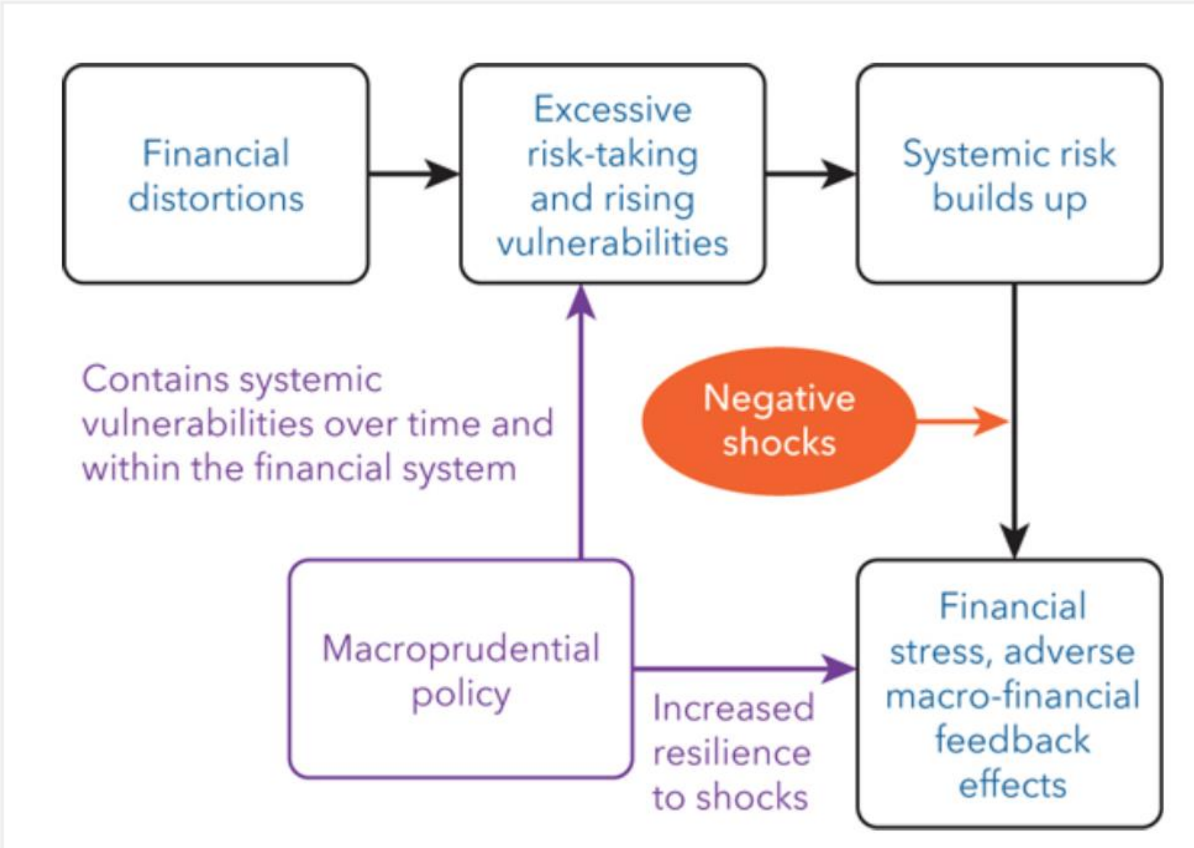
Our main purpose in this study is to oversee and compare the effectiveness, efficiency, and perspective of various Macroprudential policies to obtain better results regarding Financial stability.

While the world is facing in permanence many financial vulnerabilities, negative shocks from the financial system can be amplified and affect the real economy.

"Binding borrowing constraints can lead to asset fre sales and defaults on contractual obligations, disruptions in the provision of financial services, and ultimately a significant contraction in economic activity" (IMF 2021)

However, macroprudential policy reaches its ultimate targets by containing or "leaning" against the build-up of systemic financial vulnerabilities preventing negative shocks materialize and ensuring the "resilience" of the financial system.

Figure 5 : Macroprudential Policy Objectives



Source: IMF 2021

The US case study in terms of systemic risk prevention illustrates almost the widest view on financial stability research and development, Economists and researchers are raising their concerns on this matter by contributing to enforce the previous macroprudential policies and innovate to strengthen the potential vulnerabilities tending to impact the financial system and leading to future systemic risks.

Leaning against the Wind approach has been criticised by Economists considering that LAW promotes policy interest in order to stabilize inflation, as well as has a huge impact on unemployment and investment rate (Bank for International Settlements (2014), Olsen (2015), Sveriges Riksbank (2013)).

The "leaning" goal has to do with reducing the force of macro-financial feedback mechanisms ex ante, as vulnerabilities are building. A prime example is procyclical feedback between asset prices and credit.

"Rising asset prices inflate collateral values and relax borrowing constraints.

A stronger flow of credit, in turn, can impart momentum to rising asset prices. Macroprudential tools, such as restrictions on loan-to-value (LTV) or loan-to income ratios (LTI) can help to avoid a stretching of balance sheets, thereby reducing this feedback” (IMF Biljanovska, Gornicka, and Vardoulakis 2019).

3-Results and forward Discussion

This section examines the result effects of leaning against the wind policy rate increase on real economy seen from a macroeconomic perspective.

The LAW policy tends to promote one of the most powerful tools in monetary policy interest rate rise, according to existing empirical estimates, the probability of a crisis is positively correlated with the growth rate of real debt during the previous few years (Schularick and Taylor (2012)).

If a higher policy rate reduces real debt growth and credit demand progression
it might therefore moderate the probability of a crisis.

However, there are two main important limitations of this channel in terms of macroprudential policy:

- **Unemployment increase after possible policy action**

The Leaning against the wind has a significant impact on the unemployment rate, Economists and researchers believe that increasing the interest rate might lead to economic growth stagnation in terms of investment and employment demand in the real economy (Svensson 2014, 2015).

Let consider ***Ut*** represents the unemployment rate in quarter, considering that, in each quarter ***t,*** there are 2 possible states in economy, crisis and non-crisis.

In the first case of crisis, the employment rate is higher by a fixed magnitude, taking into account once that crisis increases in the unemployment rate, ***∆u >0***

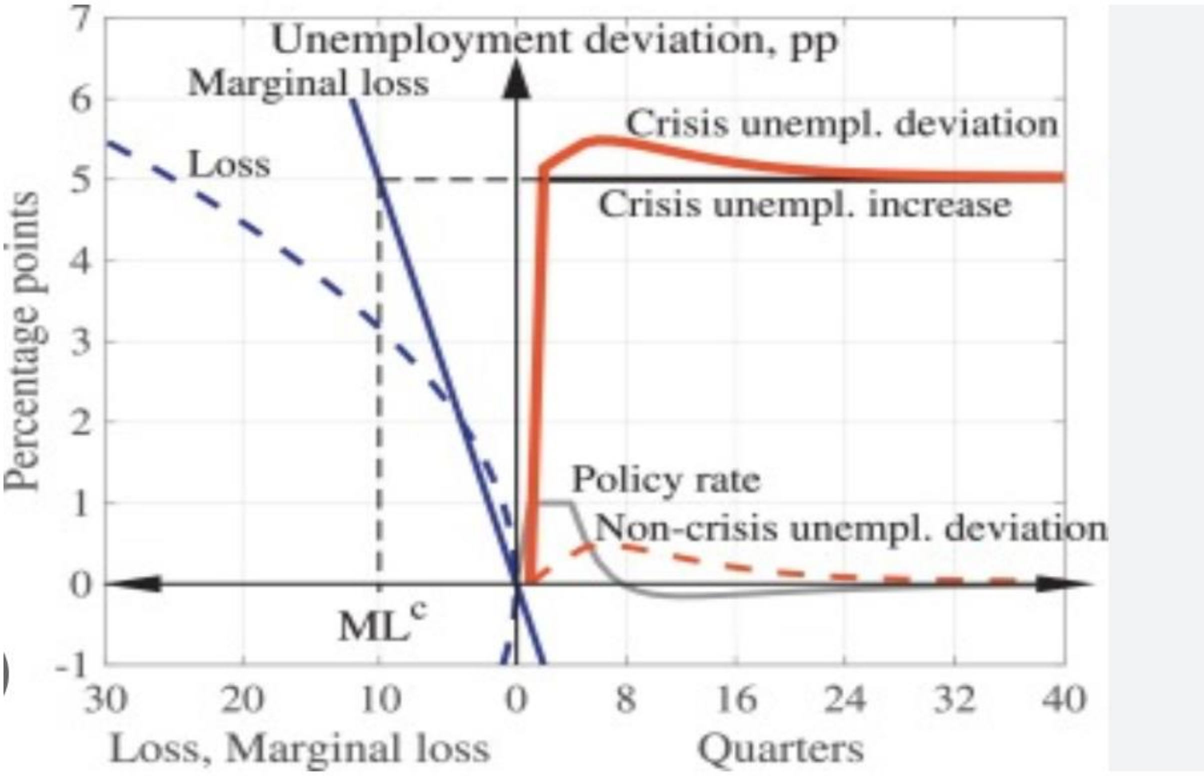
This leads to the conclusion that once the interest rate increases the unemployment rate rises and the crisis as well. In order to moderate the cost of the crisis.

Let ***Un t*** and ***Uc t*** denote the quarter-t non-crisis and crisis unemployment rates, respectively. They then satisfy:

$$u_t^c = u_t^n + \Delta u > u_t^n.$$

Source: IMF Working Paper

Figure 6 : Unemployment deviation and marginal loss Graph



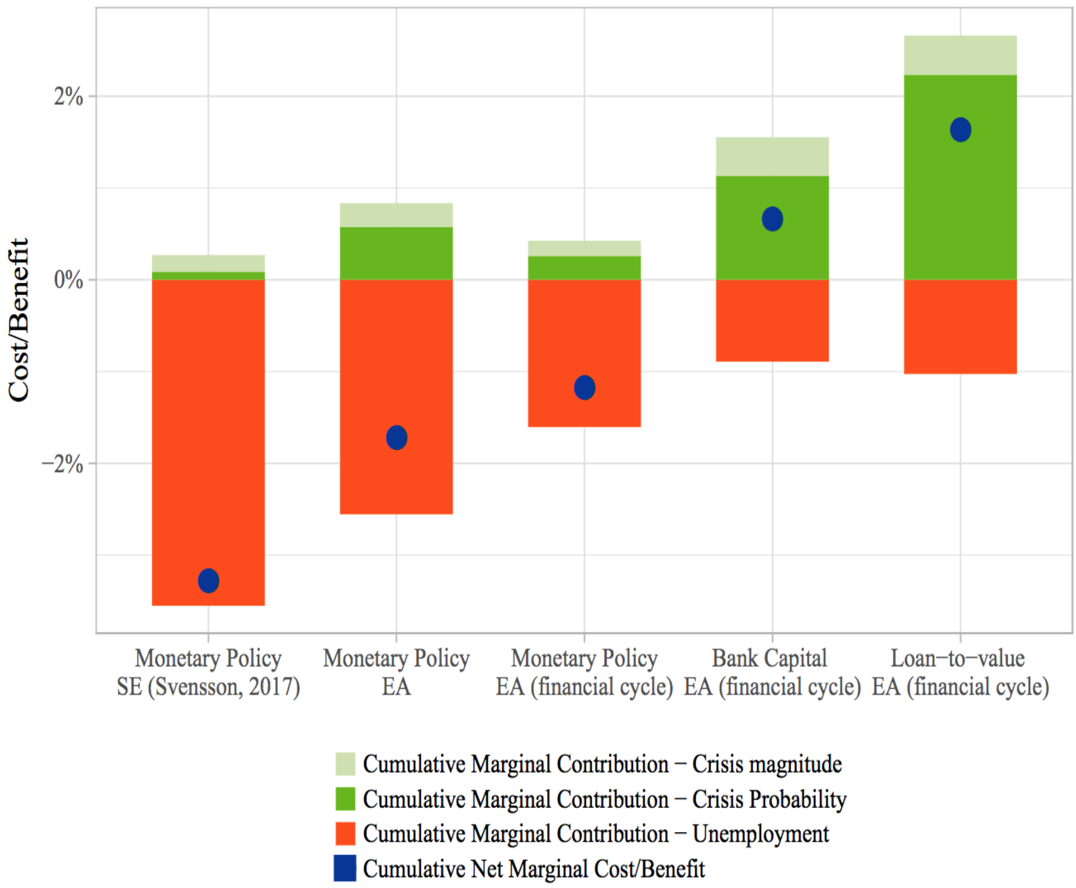
Source: Journal of Monetary Economics Volume 90, October 2017, Pages 193-213

- **Slowing down Economic growth and GDP depreciation**

Svensson's conclusions on the LAW approach have been criticised by the BIS and other Economists and researchers for not properly accounting for systemic risk and the persistence of the financial cycle, which risks ignoring the long-lasting effects on the real economy and GDP growth stagnation that financial crises may have.

Svensson considers that LAW is stopping the real economy from its main pillars of growth and promoting a high employment rate.

Figure 7 : Comparing the cost and benefits of monetary and macroprudential policy "leaning against the wind"



Source: www.ecb.europa

Conclusion

The impact of systemic risk on financial markets remains a major concern and vital subject for economists and researchers, furthermore preventing this risk requires many preventive policies in order to strengthen the vulnerabilities that might be subject or factors of contagion.

Macro- prudential and Micro-prudential policies are considered the main tools to control systemic risk and promote financial stability, moreover the cost-benefits of Leaning against the Wind approach are mostly limited in a long-term perspective, and this is clearly shown by the impact of unemployment rate and economic growth recession.

The costs of LAW are not only a weaker economy if no crisis occurs, it is found that LAW is not considered amid Macro-prudential policies but it is typically a monetary policy, and for this matter, it won't bring much certainty on the way of dealing with future systemic and financial crisis.

In the first step, we duplicate the results of Svensson (2017) for the euro area. We find that monetary policy has cumulated net marginal costs in addressing risks to financial stability.

Next it is recognised to take into account the framework of the financial cycle's influence. Making use of the SRI, we estimate again the probability of a crisis start and use these estimates to find out the benefits of a given policy in reducing the probability of a crisis.

The extension of framework in order to evaluate monetary policy, we find that the cumulated net marginal costs are lower yet still negative. Therefore, we can answer the critique of the BIS and believe that Svensson's results regarding LAW are confirmed and more reliable.

References

- IMF. 2012. “The Liberalization and Management of Capital Flows: An Institutional View.”

- 2013. “Key Aspects of Macroprudential Policy.” IMF WORKING PAPERS Macroprudential Policies and Capital Controls Over Financial Cycles INTERNATIONAL MONETARY FUND 35

- 2015. “Measures Which Are Both Macroprudential and Capital Flow Management Measures: IMF Approach.” IMF Policy Paper.

- 2017. “Increasing Resilience to Large and Volatile Capital Flows—The Role of Macroprudential Policies.” IMF Policy Paper.

- MF GFSR. 2011. «Toward Operationalizing Macroprudential Policies: When to Act? Global Financial Stability Report (September) »

- Minsky, Hyman P., «Stabilizing an unstable economy»

- Minsky, Hyman P., «A Linear Model of Cyclical Growth, The Review of Economics»

- Bengui & Bianchi. (2018). « Macroprudential Policy with Leakage»

- Yellen. (2014) « Monetary Policy and Financial Stability at the 2014 Michel Camdessus Central Banking Lecture, International Monetary Fund, Washington, D.C»

- Minsky, Hyman P., "Discussion," American Economic Review, 53,2 (May), 401-412.

- Minsky, Hyman P., "Longer Waves in Financial Relations:

- Svensson, Lars E.O. (2014), “Inflation Targeting and ‘Leaning Against the Wind’,” International Journal of Central Banking 10(2), 103–114.

- Svensson, Lars E.O. (2015), “Inflation Targeting and Leaning Against the Wind,” in Fourteen Years of Inflation Targeting in South Africa and the Challenge of a Changing Mandate: South African Reserve Bank Conference Proceedings 2014, South African Reserve Bank, pages 19–36,

- Svensson, Lars E.O. (2016a), “Cost-Benefit Analysis of Leaning Against the Wind: Are Costs Larger Also with Less Effective Macroprudential Policy?” IMF Working Paper WP/16/03, International Monetary Fund,

- Svensson, Lars E.O. (2016b), “Discussion (revised) of Filardo and Rungcharoenkitkul, Quantitative Case for Leaning-Against-the-Wind,” Research Forum on Macro-Finance, Centre for Central Banking Studies, Bank of England, May 26-27, Stockholm School of Economics,

- Svensson, Lars E.O. (2017a), "How Robust Is the Result That the Cost of 'Leaning Against the Wind' Exceeds the Benefit? Response to Adrian and Liang," Working Paper (also available as CEPR Discussion Paper DP11744), Stockholm School of Economics, available at

- Svensson, Lars E.O. (2017b), "Leaning Against the Wind: The Role of Different Assumptions About the Costs," Working Paper, Stockholm School of Economics.

- Svensson, Lars E.O. (2014b), "Monetary policy and financial-stability policy are different and normally best conducted independently," in European Central Bank (2014), Monetary Policy in a Changing Financial Landscape, ECB Forum on Central Banking, Sintra, Portugal, May 25-27, 2014, 81-89,

- Svensson, Lars E.O. (2015), "What Can Monetary Policy Achieve and What Is the Relation between Monetary Policy and Financial Stability," forthcoming in Oesterreichische Nationalbank (2015), The Challenge of Economic Rebalancing in Europe: Perspectives for CESEE Countries, Edward Elgar,

- ANGA ONGBWA Paul Do minique (2020) « Les investisseurs sont-ils favorables à une finance durable en Afrique? », Revue Internationale des Sciences de Gestion « Volume 3 : Numéro 4 » pp : 450–470