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## **Heterodox Central Bankers: Eccles, Prebisch and financial reform**

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### **Abstract**

The Great Depression led to a need to rethink the principles of central banking, as much as it had led to the rethinking of economics in general, with the Keynesian Revolution at the forefront of the theoretical changes. This paper suggests that the role of the monetary authority as a fiscal agent of government and the abandonment of the view of the economy as self-regulated were the central changes in central banking in the center. In addition, in the periphery, central banks changed to try to insulate the worst effects of balance of payments crises and the use of capital controls became more common. The experiences of Marriner S. Eccles in the United States following the Great Depression, and Raúl Prebisch in Argentina in the 1930s and in Latin America in the 1940s are paradigmatic examples of those new tendencies in central banking at the time.

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Monetary policy, economic history, heterodox economics, central banks, Real Bills Doctrine, Great Depression, inflation targeting

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## Heterodox Central Bankers: Eccles, Prebisch and financial reform

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### Introduction

Central bankers have been defined as men that lend you an umbrella, and then want it back when it starts to rain. The Great Depression saw plenty of rain, so to speak, but some central bankers did not fit the stereotype. The reason is that Great Depression led to a need to rethink the principles of central banking, as much as it had led to the rethinking of economics in general, with the Keynesian Revolution at the forefront of the so-called “years of high theory,” during which much of the rethinking was done (Shackle, 1967).

In the center, the tenets of sound finance and the Gold Standard were threatened by the economic collapse and the heightened social conflicts that followed rising unemployment. The conventional wisdom suggests that central bankers dismissed the so-called Real Bills Doctrine, and developed an activist view of the central bank. In this view, the abandonment of the Real Bills Doctrine allowed a more active control of money supply and credit. In contrast to that argument, we suggest that the role of the monetary authority as a fiscal agent of government and the abandonment of the view of the economy as self-regulated were the central changes in central banking. In addition, in the periphery, central banks changed to try to insulate the worst effects of balance of payments crises and the use of capital controls became acceptable. Marriner S. Eccles, in the United States, and Raúl Prebisch, in Argentina, are paradigmatic examples of those new tendencies in central banking in the 1930s.

Heterodoxy in central banking was a feature of the times, and a direct response to the challenges wrought by the Great Depression. Central banks that had been the stalwart defenders of sound money – from at least the 1840s when the Currency School became dominant in the United Kingdom – were redesigned to

stimulate, directly or indirectly, demand, and to maintain full employment. However, a neglected feature of the heterodoxy of central banking in the 1930s is the emphasis that was put on managing the conflict between debtors and creditors on the one hand, and the preoccupation with external shocks, on the other, which came to be seen, among certain central bankers as essential for demand management.

The remainder of this paper is divided in five sections. The next section discusses the relevance of the abandonment of the Real Bills Doctrine for the development of the new central banking practices during the 1930s. It is suggested that the abandonment of both the pre-Keynesian idea that the market was self-adjusting and the Gold Standard were more important than any particular position regarding the Real Bills Doctrine. The two subsequent sessions discuss the main innovations in central banking during the 1930s, taking the views of Marriner S. Eccles and Raúl Prebisch as paradigmatic of the new set of practices that came to dominate the period, which was referred to as “the decades of government control” by Charles Goodhart (2010). The fourth section describes the changes that occurred in Central Banking in Latin America in the 1940s and how Prebisch exported his Argentinean experience and views on Central Banking to the rest of the continent. The last section provides a few comments and draws some lessons for the current state of the art with respect to central banking.

The paper is heavily influenced by Jane D’Arista’s stance that to understand the challenges of economic policy in modern capitalist economies, one must analyze the evolution of financial institutions.<sup>1</sup> Further, we believe that the interaction of ideas and policies shape the dynamic and shifting environment in which economic policy takes place. Last, but not the least, we share with Jane the view that economic policies should be at the service of promoting a stable financial environment and full employment.

### **Rethinking Central Banking in the 1930s**

The Real Bills Doctrine suggests that the central bank passively provides liquidity to the system.<sup>2</sup> The name of the doctrine results from the notion that banks only discount real bills associated with the functioning of the economy, in particular for international trade that was essential in the 18<sup>th</sup> century when the doctrine was developed. In terms of central banking policy, the Real Bills Doctrine fundamentally meant that there was no need to lean against the wind, and money supply should adjust to the needs of trade. It is generally presumed that in the 1930s a more activist position – leaning against the wind – was developed.

In particular, Meltzer (2003) seems to believe that the abandonment of the Real Bills Doctrine was the essential first for the collapse of the economy that followed a great contraction of money supply, and then for the recovery from the Great Depression, since, in his view, the increase in money supply was the essential element in the recovery, rather than the New Deal policies.<sup>3</sup> This view, both of the recovery from the Depression and about central banking practices, has been generally accepted and is canonical among economists and policy makers.<sup>4</sup>

While it is true that some views within the Federal Reserve (Fed) in the 1930s, in particular Lauchlin Currie, were critical of the Real Bills Doctrine, and believed that the collapse of money supply played an important role in causing the Great Depression (Sandilands, 1990), it is far from clear that this view dominated policy actions at the Fed.<sup>5</sup> The available evidence seems to indicate that the actions of the Federal Reserve Banks were rather guided by practical motives and different objectives. As an example, the rise in interest rates by some of the banks following the 1918 armistice responded to inflation considerations in 1920, while their subsequent decline was aimed at counteracting the 1921 recession.<sup>6</sup> At the same time, by 1921 Benjamin Strong was willing to actively use US monetary policy to support Europe's economic recovery efforts, underscoring the importance of international objectives and in some instances their preeminence over domestic ones.<sup>7</sup> While advocating the use of active monetary policy, Strong was also aware of the limitations of counter cyclicity as clearly expressed by his testimony in the Strong Bill Hearings (1926-1927). The hearings were meant to clarify the relationship between Benjamin Strong's bank reserve stabilization policy (through open market operations) with the price stability that characterized the US economy from 1922 to 1928. During the hearing Strong argued that the Federal Reserve Board should be credited with successfully administering credit to ensure price stability. However he pointed out that: "...in case there should be a gradual decline in prices, and if then business were unwilling to borrow, he doubted whether the system could do anything to raise the price level by forcing business men to use more credit" (Fisher, 1934, p. 165).<sup>8</sup>

The limits to monetary policy took on a more central role within economic thinking in the 1930s, and became by the middle of the decade the dominant view held at the FED by the chairman Marriner S. Eccles, and also by Currie, a crucial advisor to Eccles on economic policy. Monetary policy was "like pushing on a string," and, hence, incapable of getting the economy out of the recession. Expansionary fiscal policy was then necessary to get out of the recession (Laidler and Sandilands, 2002; Vernengo, 2009).<sup>9</sup>

If the Real Bills Doctrine was really abandoned then, that should not be equated with an acceptance of the Quantity Theory of Money, or the notion that money was exogenous, or more extremely an early version of Monetarism.<sup>10</sup> At this point, it is important to understand a common misconception regarding the meaning and the role of the Real Bills Doctrine in monetary policy.<sup>11</sup> The idea of money endogeneity, which is implicit in the Real Bills Doctrine, does not *per se* suggest that the monetary shocks are irrelevant and money is not important. Further, and perhaps more importantly, the acceptance of the Real Bills Doctrine, and of endogenous money, is sometimes held hand in hand with a view of the economic system as self-regulated in the direction of full employment. That was certainly the position that several post-Wicksellian and Austrian authors held in the 1930s.<sup>12</sup> But the view of a self-regulated market system is not equivalent to the Real Bills Doctrine.

First, most authors that are critical of the Real Bills Doctrine and suggest that it was central in causing the Great Depression argue that according to that doctrine monetary authorities cannot affect monetary equilibrium. Money supply being passive, in this view, is equated with an ineffective monetary authority, something that is seen as a quintessentially incorrect idea, and one that is behind the recessionary monetary contraction that caused the Depression. However, it is far from clear that the defenders of the Real Bills Doctrine thought that the monetary authority was ineffective.<sup>13</sup> Their point seemed to be that printing money would not create an excess supply of money or *per se* activate the demand for credit. What this suggests is that the monetary authority might be incapable of getting the economy back on track in a downturn by changing exogenously the money supply. The easiness of credit is, in the Real Bills Doctrine, measured by low interest rates rather than an expansionary monetary supply.<sup>14</sup>

Second, it is clear that at least some authors that defended the Real Bills Doctrine did not believe that the system had a tendency towards full employment. The classical political economy authors, even when they accepted Say's Law, did not suppose that with price flexibility the system would move towards full utilization of resources. In other words, lower real wages or lower rates of interest would not lead to the functioning of the substitution principle and the increase in demand for the relatively cheap factor of production. Classical authors simply assumed that the level of output was given. Hence, classical authors that were anti-Bullionist, like Thomas Tooke, accepted the notion that the system could be stuck with significant amounts of idle resources.<sup>15</sup>

This is quite different from the so-called Neo-Wicksellian model, which had a considerable following in the late 1920s and early 1930s, according to which money was endogenous, and the central bank set its interest rate on the basis of an unobservable natural rate of interest (Amadeo, 1989). Inflationary pressures were an indication of a bank rate that was too low with respect to the natural one, and vice versa in deflationary situations.<sup>16</sup> It is only in this case, when one has combined the idea of endogenous money with the view that the system will revert to the mean, as a result of inflationary and deflationary forces, to full employment monetary equilibrium – to borrow the term used by Gunnar Myrdal about a situation in which the bank rate is equal to the natural rate – that one can consider that Real Bills Doctrine defenders would suggest that the central bank should do nothing beyond reducing the bank rate when deflationary pressures are present.<sup>17</sup>

However, during the 1930s the Neo-Wicksellian model became increasingly less relevant after the onslaught of Keynesian ideas. The very idea that a natural rate regulated the equilibration of investment to the level of full employment savings was discarded. Contrary to the conventional view, the 1930s should not be seen as a decade in which central banks moved away from the Real Bills Doctrine – a point that is considerably murkier and less clear than often suggested – but a decade in which they moved away from the Neo-Wicksellian idea that the economic system is self-regulated towards full employment. The Real Bills Doctrine would then only say that if central banks should contribute to reducing unemployment, they cannot do it by simply printing money to promote credit, since demand for credit depends on the needs of the real economy. But certainly that does not mean that central banks cannot do anything.

More important than the alleged vanquishing of the Real Bills Doctrine for the understanding of the changes in central banking practices in the 1930s is the collapse of the Gold Standard, which gave an additional degree of freedom to central bankers, allowing the management of capital flows and a certain control over the evolution of the exchange rate. The rules of the game, as Keynes referred to the Gold Standard rules, implied that often interest rates had to be kept at very high levels to preclude capital flight, and in a situation in which price flexibility was incapable of producing a self-adjusting economy, those rules might be the cause of permanent stagnation.

## Marriner Eccles and the Keynesian Revolution

Marriner Stoddard Eccles (1892-1977) was a Republican banker in Ogden, Utah with a reputation for shrewd and successful business experience and a few unusual ideas when he first went to work for the Treasury at the height of Franklin Delano Roosevelt's New Deal (Hyman, 1976) in 1934. He was subsequently appointed to the Federal Reserve and was influential in crafting the 1935 Banking Act, being appointed the first chairman of the Board of Governors, a position that did not exist before, and that centralized power in Washington away from the New York Fed (D'Arista, 1994).

Eccles' views on the Depression were developed fundamentally on the basis of his own experience as a businessman and banker, and were only to a lesser degree influenced by some underconsumptionist popular authors of the time (Vernengo, 2009). Eccles views on the Great Depression tended to emphasize the role of underconsumption and unsustainable debt in promoting the collapse of the economy. He suggested to a gathering of the Utah State Bankers Convention in June 1932 that:

“The depression within our own country was primarily brought about by our capital accumulation getting out of balance in relationship to our consumption ability. (...) The difficulty is that we were not sufficiently extravagant as a nation. We did not consume what we were able to produce” (Marriner S. Eccles Papers, Box 72, Folder 2).

Also, he emphasized that international debt was an essential part of the Great Depression. For him, “the matter of international debts is the commencement, I believe, of our problems,” (*ibid.*) and he understood that a worldwide recovery was heavily dependent on a recovery in the United States. For him, “a revival in this country, a willingness to sit down and discuss world economy problems in the light of financial and business necessity would go a long way toward bringing the world out of this depression” (*ibid.*). Eccles was for the cancellation of inter-allied war debts, a debt jubilee so to speak, suggesting that an unpayable burden of debt would create a reduction in demand and perpetuate the depression.

In other words, the problems of what has been referred to as debt-deflation were very clear, and not just regarding international debt.<sup>18</sup> For that reason, he was not only favorable to the New Deal programs to reduce the burden of debt on homeowners and farmers' mortgages, but also he was essential in the design



of the new housing market, in particular the Federal Housing Authority (FHA) – one of the key New Deal programs – with a particular preoccupation of making it easier for people to obtain loans to finance the construction of new residential and farm buildings. The plan proposed by Eccles was based on what most plans to deal with distressed debtors do, namely: it lowered interest rates and provided longer maturity. The plan also allowed for a higher percentage of the property value to be funded, increasing the number of families that would be able to come up with a down payment (Hyman, 1976).<sup>19</sup>

Further, Eccles was clear that monetary policy was relatively inefficient as a way to get the economy out of a crisis when the rate of interest was close to zero and deflationary forces were persistent, and he famously popularized the expression that monetary policy in those particular circumstances was like “pushing on a string.” During the hearings on the Banking Bill of 1935, in March of that year, he said:

“At the present time we are still in the depths of a depression and, beyond creating an easy money situation, there is very little, if anything, that the Reserve organization can do toward bringing about recovery. *One cannot push a string.* I believe, however, that if a condition of great business activity were developing to a point of credit inflation, monetary action could be very effective in curbing undue expansion. That would be pulling a string” (Emphasis added. The Marriner S. Eccles Document Collection, FRASER Economic Library and Archives; Summary of Statements on the Banking Act of 1935, p.17).

Monetary policy had asymmetric effects, being more effective as a tool for stopping a booming economy than to stimulate a sluggish one. This asymmetry did not mean that monetary policy became irrelevant, but the focus would have to be different, since just increasing money supply would not stimulate credit. In his view:

“Every effort has been used to bring this about by the Reconstruction Finance Corporation and the Federal Reserve Banks without result, demonstrating that extension of credit alone is not the solution. Credit is the secondary offensive when there is a basis of credit through the raising of the price level and an increase in the demand for goods requiring credit. Nor is the correction of our present difficulties to be found in a general scaling down of debts in an effort to bring them in relation to the present price levels” (The Marriner S. Eccles



Document Collection, FRASER Economic Library and Archives; Testimony to Senate Finance Committee, February, 1933, p. 709).

Further, Eccles thought that money supply was actually adequate even in the worst of the Depression, in part because the velocity of circulation could vary, and more importantly because the main problem was not the level, but the distribution of money supply. In his view: “there is plenty of money today to bring about a restoration of prices, but the chief trouble is that it is in the wrong place; it is concentrated in the larger financial centers of the country, the creditor sections, leaving a great portion of the back country, or the debtor sections, drained dry” (The Marriner S. Eccles Document Collection, FRASER Economic Library and Archives; Testimony to Senate Finance Committee, February, 1933: p. 711). Wall Street, so to speak, had plenty of money, but debtors were in a difficult position, and the solution depended on a rebalancing of debtor-creditor inequities.

That is why the solution was for government to spend money and provide debt relief for the unemployed. The increase in public debt would compensate the fall in private debt, caused by the negative effects of deflation on the net wealth of private agents. Further, he argued that his program “can be financed in one of two ways – either through a Government bond issue, or through the issuance of currency by the Treasury which would be put into circulation through the Federal Reserve Banks in payment of the projects proposed” (The Marriner S. Eccles Document Collection, FRASER Economic Library and Archives; Testimony to Senate Finance Committee, February, 1933: p. 720). Beyond increasing spending, he favored increasing certain types of taxes (Eccles favored higher income for the wealthy and inheritance taxes) that had a small impact on private spending.

Eccles did not suggest, however, that the Federal Reserve should necessarily finance government spending directly. His argument was that the Fed had a responsibility in “protecting the bond market from the pressure of new Government bond offerings at a time when it [was] desirable to preserve that market for the necessary Government financing required to meet its . . . operating deficit and provide for unemployment relief until the beneficial effects of the proposed emergency measures [were] realized” (ibid. p. 722). Monetary policy, during Eccles tenure as chairman, was centered on the role of the Fed as fiscal agent of the government, maintaining a 2.5 percent interest on government bonds, and increasing the amount of bonds held by the banking sector, in particular the Fed. By the late 1930s, the Fed switched its portfolio to

hold a greater amount of long-term bonds (7 years or more) instead of bills of shorter maturity (12 months or less).

Among other things that allowed the Fed to keep the rate of interest on long-term government bonds relatively low, which would become after the war and until the so-called Fed-Treasury Accord of 1951 an informal agreement with the Treasury to keep the rate within the 2½% upper limit,<sup>20</sup> Eccles considered the role of the Federal Reserve as fiscal agent of the Treasury as the essential one, in a situation that only expansionary fiscal policy could turn the economy around.

Further, it is important to note that Eccles views were developed in an environment in which the idea that the economic system might be self-adjusting and government intervention would not be required had lost all intellectual currency. In fact, in his 1933 Senate Testimony Eccles had called for a “national planning board, similar to the industries board during the war [World War I], [that would be] necessary to the proper coordination of public and private activities of the economic world” (The Marriner S. Eccles Document Collection, FRASER Economic Library and Archives; Testimony to Senate Finance Committee, February, 1933, p. 731).

His views were in perfect harmony with the views of his advisors, in particular Currie. Currie’s unpublished review of Keynes’s *General Theory*, writing as an internal memo for the Board, was very perceptive and did not fall in the trap that many other early Keynesians fell – e.g. Hicks and Modigliani, who were central in the development of the fixed-price version of Keynesian ideas that would become known as the neoclassical synthesis – assuming that Keynes’ main proposition rested on the notion of fixed wages. He clearly noted that “in a downturn wage reductions are likely to result in an expectation of further reductions, a fall in prices, a diminished prospective yield of new capital, and, hence, lessened investment and employment” (Marriner S. Eccles Papers, Box 111, Folder 1).

In addition, not only did Eccles believe that the economic system was not self-adjusting, but also he did not seem to have completely discarded the Real Bills Doctrine. In fact, according to Meltzer (2003, p. 470) Eccles “did not seem to share Currie’s strong beliefs about the need to abandon the Real Bills Doctrine [and] he preferred to rely on judgment and wanted a large measure of authority to do what he believed was in the public interest.” In all likelihood, Eccles did not care much for the Real Bills Doctrine, since he was

fundamentally a pragmatic policy maker. But he did share the notion with endogenous money authors that credit conditions depended on the needs of the real economy. In this sense, the central change in the Fed policies during the 1930s was the increasing use of public debt to maintain low interest rates as a tool to support the fiscal expansion, within a broadly Keynesian view that the system could remain below full employment for a prolonged period.<sup>21</sup> The view that the Fed is responsible for the employment level and not just inflation, in the case of the United States, which was a legacy of the New Deal, has survived the onslaught of the era of the ‘triumph of markets,’ to use Goodhart’s (2010) expression, which has led in many other places to central banks concerned uniquely with inflation targeting.

### **Raúl Prebisch and Central Banking in the Periphery<sup>22</sup>**

Raúl Prebisch (1901-1986) is mostly known for his long-run analysis and analysis of the development problems of Latin America, which he fully stated in “The Economic Development of Latin America and Some of its Principal Problems” (1949 [1950]), also known as his ‘Development Manifesto.’ Less well-known is his role as the first General Manager of the Central Bank of Argentina, an institution that was primarily designed by him (Dosman, 2009) and instituted coincidentally in 1935, the same year in which the Banking Act recreated the Fed in its modern guise.

The project for the bank was drafted by Prebisch himself in 1934 at the request of the Minister of Finance Federico Pinedo. It was conceived as an institution independent of the government (‘It is not conceivable that a Central Bank be managed by governments’) permitting a more rational distribution of monetary functions and more efficient management of reserves, whose main objective was monetary stability, along conventional lines. However, while it is true that by the mid-1930s Prebisch still believed that fiscal deficits could be inflationary, and that was an important reason for his defense of central bank independence, it is important to note that the design of the central bank was not particularly conventional. As noted by Dosman (2009, p. 98), Prebisch wanted to centralize several activities in the bank, including the management of the exchange control system, which allowed it to administer the exchange rate, to buy and sell bonds and regulate import controls, and far reaching regulatory powers, in order not just to control inflation, but also manage the cycle.<sup>23</sup>

Contrary to the view of Prebisch as a conservative at the service of local elites and international financial interests, he seemed to be a pragmatic policy maker trying to manage the severe problems of the Great Depression in a peripheral country.<sup>24</sup> In other words, Prebisch saw monetary policy as an instrument to manage the cycle, which was in the case of the periphery fundamentally associated with external shocks that affected the terms of trade and the ability to import.

To this end, Prebisch thought that the Central Bank had a role to play in smoothing out the effects of the economic cycles, although he found illusory to think that it could offset the movements of the cycle. As he put it: (RP, Vol. II, p. 64):

“To expect that undulatory movements in the economic activity of the country can be offset by the excellence of a monetary system would be to fall in the same illusion harbored by many economists of the United States with respect to the Federal Reserve, prior ... to the ... collapse. But it cannot be doubted that the amplitude of those movements could be cushioned by an efficiently run Central Bank.”

It is important to understand that the cushioning of the fluctuations of the business cycle did not respond to the objective of maintaining domestic output stability, but rather to that of maintaining the stability of prices and that of money. It is in this sense that the lean against the wind monetary policy was in essence of an orthodox nature (see, RP, Vol. III, p. 90).

The lean against the wind monetary policy was reflected in one of the key objectives of the Central Bank as set out in Prebisch's 1934 project, which was to ensure an adequate level of reserve accumulation as a precautionary motive of building buffer stocks to confront export shocks and sudden capital stops. As he put it (RP, Vol. II, p. 610-11): “The ascending movements are, in general, of a limited duration. The opportunity to repair the consequences of past wrongs and accumulate reserves for difficult times, whose return it is prudent to foresee, should not be then undermined.”

As such, the first article of project proposal for the creation of a Central Bank in Argentina dealing with its functions stated: (ibid, p. 383) “The Bank will have as objective: a) The concentration of sufficient reserves to moderate the consequences of fluctuations in exports and the investments of foreign capital, on money, credit, commercial activities, in order to maintain the value of money.”<sup>25</sup>

Following the creation of the Central Bank, the Argentine economy experienced an expansion in economic activity lasting until 1937. During this time the Central Bank, in line with the orthodox spirit of its creation, used open-market operations, interventions in the foreign exchange market and moral suasion to avoid an over expansion and overheating of the economy (see, *ibid*, p.64 and 359, pp. 610-622; RP, Vol. III, pp. 88-119).

However, the force of events prompted by the beginning of the downward phase of the cycle in 1937, led the bank to progressively evolve into a less orthodox institution whose goal became more ambitious than just ‘cushioning’ the phases of the business cycle to ensure their orderly occurrence and maintain the stability of money, something not completely dissimilar to the effects of the 1937 recession on the policies of the Roosevelt administration. The Central Bank of Argentina became aware that it had a double objective, price and output stability, and that the balance of payments was central for both.<sup>26</sup>

Initially in 1937, “the Central Bank... was predisposed to consider this contraction of domestic economic activity as a logical and natural event, indispensable to reduce imports and establish the equilibrium in the balance of payments” (RP Vol. III, pp.101-102). Yet, as the contractionary effects wrecked havoc, the Central Bank decided to change and stabilize domestic activity. According to the 1938 Central Bank Report:

“... monetary policy can propose two objectives in the face of the economic cycle. The first consists in avoiding that the expansion of credit accentuates the intensity of the wave motion... The second objective goes further. It is not limited to avoid the aggravation of these fluctuations, but it intends, furthermore, to limit its amplitude and reduce the intensity of the variation of purchasing power during the cycle, in order to attenuate the consequences of its variations on the volume of domestic economic activity” (RP, Vol. III, p. 104).

The need for countercyclical action resurfaced soon after the beginning of World War II, as Argentina was faced with a growing external imbalance, and the “perception of decline in business activity and in particular in the construction sector” leading to a fear of general economic stagnation (RP Vol. IV, p. 156-157). The plan for countercyclical action (The Plan for National Reactivation) contemplated an expansionary monetary policy coupled with exchange rate controls, but it also for the first time developed the idea that industrialization

was the key to a new development strategy for Argentina. More specifically, the plan sought to purchase agricultural surpluses to avoid price declines, increase construction activity and promote the finance of industrial development. It would have also created an industrial development bank, to promote the development of long term capital markets, with the intention of stimulating industrial exports, to reduce balance of payments problems.

The plan was designed by Prebisch, but became known as the Pinedo Plan, who had been reappointed briefly as Finance Minister, and included elements that would become associated with the economic policies of the Peronist government in subsequent years (Llach, 1984). However, the minister was dismissed and the plan floundered, which shows that the Argentine authorities of the time remained appreciably fond of orthodox economic thinking.

The Plan Pinedo was never approved. The force of events superseded it and, in particular, by the war effort of the United States which led to an increase in internal demand and imports. As put by Prebisch (RP Vol. IV, p. 160): “The United States, which in 1940 had been absent in the market of certain Argentine products, starts to purchase very actively. This soothes our balance of payments concerns, allows a more flexible distribution of foreign exchange, increases domestic purchasing power and rapidly changes the context of the situation.”

The change in external conditions led to the suppression of import permits and the flexibilization of the exchange rate regime, even though a dual exchange rate remained in place. It is also important to note that in 1943 the central bank re-imposed exchange controls to deter the inflow of short-term capital and avoid its destabilizing effects and to stimulate foreign direct investment inflows instead. While this measure was in force only for three months, it is worth quoting Prebisch at length due to its current relevance:

“This capital [short-term capital] went to further inflate the categories of goods or assets that were already inflated, and did not translate, except in very rare occasions, in a real increase in the production of the country... the measures adopted by the government permit to make an exception, to allow the inflow of these capitals if it is shown that these are oriented towards the increase in real production...” (RP Vol. IV, p. 183).<sup>27</sup>

Prebisch viewed the change in external conditions after the start of WWII and its effects on Argentina as a validation of his business cycle approach. The business cycle and its phases was a recurrent and natural phenomenon. The phases were related, and the more exaggerated was the boom (expansionary) phase, the sharper would be the contraction. The change from boom (expansionary) to bust (contractionary) conditions occurred rapidly and unpredictably, requiring flexibility in economic policy and more importantly moderation and prudence, and an active policy of neutralization.<sup>28</sup>

While he did recommend avoiding excessive fiscal spending and lax monetary policies, and increased savings during the boom (expansion) to face and weather the inevitable contraction subsequently, he argued that a country like Argentina should not be forced to forego higher growth and improved material well-being during the upward phase of the cycle, only to face the consequences of a downturn.

He ultimately recommended shielding the domestic economy from the ups and downs by a process of substitution of foreign imports with domestic industry and production. This was a basis for arguing for the promotion and development of domestic industry and the expansion of internal activity.

These ideas were already embedded in his book proposal *Money and Economic Activity* on which he began working in 1943, the year in which as a result of a military coup marking the eventual ascendancy of Peronism, Prebisch lost the position in the administration, including his Central Bank appointment, that had been essential for the development of his ideas since the early 1930s.

In *Money and Economic Activity*, he argued that monetary and financial policy should have three main aims: (i) attenuate the incidences of the abrupt changes in harvest conditions and the fluctuations and external contingencies; (ii) create the monetary conditions that stimulate the development and maintenance of full employment of the working force; (iii) foster and support the highest possible rate of growth of economic activity.<sup>29</sup>

The successful achievement of these policies required an imports policy and a fiscal reform. The imports policy consisted in ‘the rational modification of their composition to serve certain objectives rather than their systematic restrictions.’ Prebisch thought that a policy of autarky was as absurd as a policy of free trade and agreed that Argentina should participate to the extent possible in the international economy but to



avoid a 'constant subordination of the national economy to external movements and contingencies,' the country needed to 'develop inwardly, strengthening its internal structure and achieve an autonomous functioning of its economy.' Prebisch's defense of national policy autonomy eventually took on a regional tone, as he became convinced that the Argentinean cycle and its features were not specific to Argentina but that they were rather the manifestations and characteristics of the workings of a global process, a universal cycle. It is in this sense that Prebisch argued, as mentioned above, that the Argentine cycle was a mirror, a reflection, of the external, of the international monetary cycle.

The global or universal cycle was triggered by developed countries and more specifically by what he termed to be the cyclical center. The cyclical center referred to the country (perhaps group of countries) whose economic repercussions – due to its importance – were transmitted to the rest of the world. In the nineteenth century and up until WWI, Great Britain held the cyclical center title, only to be taken by the United States thereafter. The countries subject to the influence of the impulses of the center, the periphery, included all Latin American countries.

The universal or global cycle was thus divided into two phases with different characteristics, one affecting the center and the other, the periphery, that is, Latin American countries. Moreover, since the periphery faced a binding external constraint while the center did not, they faced markedly different restrictions in their use of domestic policy space.

Faced with a contraction of economic activity and price declines, the cyclical center could always resort to the use of monetary instruments such as the money supply or interest rates without regard for exchange rate parity or international reserve adequacy conditions. Contrarily, the periphery, bereft of the use of this privilege by the binding character of its external constraint, had to turn to the use of exchange rate variations or quantitative restrictions and controls (RP, Vol. IV., pp. 225-226).

Prebisch also contemplated a policy of reserve accumulation by the countries of the periphery. In fact he argued, very much in line with his earlier views, that the countries of the periphery had 'the responsibility' to generate the financial resources during the upward phase of the cycle (including international reserves) to face and weather contractions (Vol. IV. p.232).

## **Prebisch and heterodox Central Banking reform in Latin America**

Following his departure from the Central Bank in 1943 and until 1948, Raúl Prebisch used his acquired policy experience to participate, assist and promote banking reforms in Latin America.<sup>30</sup> He was instrumental in the reform process of the central banks and banking system of the Dominican Republic (1946), Guatemala (1945), Paraguay (1943-1944) and Venezuela (1948).<sup>31</sup>

Prebisch's involvement benefitted to a great extent from the change in United States-Latin America relations that took place in the 1930s and 1940s. Under the leadership of F D. Roosevelt, the United States began a Good Neighbor policy towards Latin America based upon non-intervention and non-interference with its domestic affairs. This policy evolved into one of active financial and economic cooperation. It included the support of trade expansion and development projects through loans from the Export-Import Bank and the Exchange Stabilization Fund; the compensation for the loss of European markets after the war through series of financial schemes including the stabilization of commodity prices. Finally, the United States announced the creation of a publicly controlled Inter-American Bank to provide balance of payments support and long-term development finance (see, Helleiner, 2009).

As part of this overall policy, the United States embarked on providing technical assistance, which was provided in monetary matters at the request of Latin American governments. The first mission took place in Cuba in 1942 whose goal was to provide assistance in the establishment of a Central Bank. Cuba wanted the Central Bank to have a broad mandate including lending to the government, act as a lender of last resort and carry out monetary policy to fulfill domestic development goals. Thereafter, under the lead of Robert Triffin, the United States provided technical assistance to the Central Bank of Paraguay among others. Triffin who had met Prebisch in Mexico invited him to join the mission.

Triffin shared similar views to those of Prebisch on the role of the Central Bank. Both men understood that the functions of the Central Bank were not only limited to maintaining nominal stability and reacting to external shocks and balance of payments difficulties. Central banks also had to follow a countercyclical stance and promote domestic objectives including growth and employment. Triffin was in favor of economic planning, a managed economy, infant industry protection, and was also sympathetic to state guided industrialization.

In the Monetary and Banking Reform in Paraguay (1947a), Triffin makes his point as follows (p.72):

“The Bank of Paraguay is authorized to carry out every type of banking operation...It possesses broad powers of monetary regulation, almost without precedent. The monetary issue is not regulated by rigid provisions linking it to gold or foreign exchange reserves, nor are there inflexible limitations upon the granting of credit to the State...the law departs from the traditional concepts which...have dominated the orthodox theory and practice of central banking...From their very initiation, many of the central banks established on this continent...suffered from a servile imitation of the monetary and banking regimes of the great financial centers of the world and from a consequent lack of adaptation to the economies they were to serve.”

The main objective of the Bank of Paraguay involved not only ‘the creation of maintenance of a monetary and financial structure most favorable to the orderly development of the national economy’ but also the adaptation of the means of payment and credit policy to the development of productive activities in line with the RBD discussed in the first section of this paper.<sup>32</sup> The Central Bank of the Dominican Republic had a similar purpose, stimulating the development of the economy (See, Wallich and Triffin, 1953).

The central bank of Paraguay as in the case of the Dominican Republic had a definite countercyclical objective illustrated by its mandate to accumulate international reserves as a precautionary balance of payments measure. Also in the case of Paraguay, Central Bank regulation contemplated the intervention and regulation of ‘abnormal movements of capital’ in order to prevent unwarranted disturbances in the domestic economy. For its part, the Dominican Republic Central Bank Law postulated the use of anticyclical policy of credit stimulation through re-discounts and advances.

As part of monetary management Triffin proposed that central banks concentrate all banking activities of the State including medium and long-term lending to agriculture and industry. In the particular case of the Dominican Republic, the Central Bank also had the role of allocating credit through a government development bank (Banco Agrícola e Hipotecario; Article 4a)3) Central Bank Law).

Finally crucial to the whole central bank reform project was a framework for exchange controls. In general terms, Triffin viewed exchange controls as nondiscriminatory “consisting in an official exchange rate and a free, auction price of foreign currencies; the former would be stable, the latter would fluctuate according to fluctuations in demand and supply. The low official rate would apply to “easily controllable exports” (which the author thinks would be the overwhelmingly larger part of all exports), to certain categories of “necessary or essential” imports, and to approved capital exports; the higher auction rate would apply to other imports, to uncontrollable exports and other exchange proceeds of “unimportant or practically uncontrollable transactions” (Harbeler, 1947).

Triffin’s ideas were partly influenced by Prebisch’s own experience as he himself recognized. In particular in the case of Paraguay, Prebisch was instrumental in the design of ‘exchange controls.’<sup>33</sup>

By the time Prebisch had ended his Latin American central banking period, he had assigned a greater role to monetary policy in maintaining growth and employment. Indeed, in 1948 a year prior to his joining ECLAC, Prebisch argued that the central bank should give hierarchical priority to the objective of maintaining stable growth consistent with the maximum possible employment of productive factors. This was the most important objective of monetary policy. This was an overarching objective which subsumed responding to external shocks, the accumulation of reserves for precautionary motives, and the lender of last resort functions (RP, Vol. IV, p.376).

## Concluding Remarks

The 1930s saw the collapse of the Gold Standard, and the slow transition from the British-centered international division of labor to the more complex arrangements of the Cold War era. Central banks, as almost all institutions of the period, went through significant changes. The Victorian dreams of a self-adjusting economy with a tendency to full employment and an orderly division of labor, where the periphery only produced commodities and imported manufactured goods, were utterly shattered by the harsh realities of the Great Depression.

In the United States, the Fed was re-organized by two Banking Acts and the dominant personality of Marriner S. Eccles, a Western banker in a progressive administration – who considered the role of the

Federal Reserve as fiscal agent of the Treasury as the essential one in a situation that only expansionary fiscal policy could turn the economy around – shaped the organization of the new monetary authority. In Argentina, Raúl Prebisch, a very young policy maker in a conservative government, designed the new Central Bank, with a view that considered that an independent central bank could minimize the effects of external crises, and smooth out the cycle in particular. Both were more than willing to allow a more depreciated currency and the abandonment of the Gold Standard, but more importantly they both moved to an understanding that the central bank had an important role if the economy did not move automatically to full employment.

In other words, by the mid to late 1930s, both Eccles and Prebisch did not consider that the only role of the central bank was to control inflation, even though they remained concerned about inflation, but on the contrary they envisioned an important role for the central bank in the creation and maintenance of full employment conditions, in the center, or higher growth rates, in the periphery. The embrace of this quintessential Keynesian understanding of the role of central banks was one of the most revolutionary aspects of the institutional transformations of the 1930s. In the following decade, Prebisch went further and argued that the primary role of a central bank was to maintain a growth path consistent with the full utilization of resources. The opinions of Prebisch were also shared by Robert Triffin who led the United States missions in Latin America in the 1940s to reform central banks and the banking system.

This particular development of the 1930s was completely reversed with the combined effects of the Monetarist and New Classical counter-revolutions and the Great Inflation of the 1970s and coalesced in a policy framework known as flexible inflation targeting. In a recent study by the Committee on International Economic Policy and Reform (2011, p. 1) it is argued that the basic tenets of the framework developed remain “uncontroversial.” Among those tenets are the ideas that there is “no permanent tradeoff between inflation and unemployment” and that central banks should aim “to stabilize inflation around its target but also minimize the output gap” (*ibid.*). In other words, the pre-Keynesian (or post-Wicksellian) ideas that predominated before the revision of central banking practices in the 1930s are back, and in spite of the Global Financial Crisis they remain very much in place.

## Notes

- \* The opinions here expressed are the authors' own and not necessarily those of the institutions with which they are affiliated. A preliminary version was presented in May 2008 at the Political Economy Research Institute (PERI), University of Massachusetts, Amherst. We thank, without implicating, comments by conference participants. We are grateful to Jane D'Arista for insightful and very valuable comments to an earlier version of this paper.
- <sup>1</sup> For a discussion of the importance of the evolution of the banking sector and how it affected financing practices and the process of growth and development over time, see Chick (1986).
- <sup>2</sup> The Real Bills Doctrine (RBD) argues that money (bank notes) are 'lent in exchange for title to real values or values in the process of creation.' Hence, money cannot be issued in excess (i.e., there cannot be an excess supply of money.) Bank notes in excess of 'real value' return to the issuer rather than inflate nominal values. Adam Smith was an early proponent of the Real Bills Doctrine. For a discussion of the Real Bills Doctrine, see Green (1987). For a discussion of Smith's views on monetary and banking principles, see Laidler (1981).
- <sup>3</sup> Friedman and Schwartz (1963) is the *locus classicus* of the monetarist view of the Great Depression. For a recent view which suggests that the RBD, not the Gold Standard is behind the Great Contraction, see Timberlake (2008). For Timberlake, the RBD has a 'bright' and 'dark side.' The bright side is the discounting of bills (or the issue of bank notes) for title to real value or value in the process of creation, and conforms, according to Timberlake, to the 'form and method of the gold standard' (*ibid.*, p.305). The bright side is represented by Benjamin Strong, president of the Federal Reserve Bank of New York from 1914 until his death in 1928, and whose policies while conforming to the RBD maintained a high degree of nominal stability from 1922 to 1928. The 'dark side' of the RBD is the 'condemnation of all monetary instruments used 'to support' bubbles, and in general, money and stock market exuberances. The dark side of the RBD is embodied by Adolph Miller who replaced Strong as the strong man of the Federal Reserve System and who managed to impose his views on monetary contraction as an antidote to stop stock market speculation. See also Friedman and Schwartz (1963).
- <sup>4</sup> For a critique of the conventional view about the role of the New Deal, see Hannsgen and Papadimitriou (2009).
- <sup>5</sup> From a mainstream view, the Federal Reserve System (1913) and 'monetary-institutional structure' of the United States reveals the contradictory influence of the RBD, but also that of the Gold Standard and the granting of 'ample' discretion to the respective governors (Mints, 1950). See also Hester, 2008.
- <sup>6</sup> The Federal Reserve Bank of New York raised its discount rate by 244 basis points in 1920. Production levels declined by 35% in 1921 (Kuehn, 2012).
- <sup>7</sup> In 1920, the League of Nations endorsed the ter Meulen Plan, which consisted of using government bonds as a guarantee for private credits for the financing of Europe's recovery. Strong suggested the participation of American financiers with the support of an active policy on the part of the US government. Strong's support of Europe earned him the enmity of Herbert Hoover who accused him of being a 'mental annex to Europe', blaming him in part for the Great Depression. See Roberts (2000). Strong played an instrumental role also in the restoration of the pound to a 4.86 par with gold, a key objective of England's Central Banker Montagu Norman. See Moggridge (1972) and Ahamed (2009).
- <sup>8</sup> Strong is often portrayed at the same time as a RBD proponent, a monetary policy activist and Gold Standard adherent (Timberlake, 2009; Roberts, 2000). Hender (2008) argues that by 1923, Strong realized the invalidity of the RBD and began using open market operations.
- <sup>9</sup> Laidler and Sandilands (2002) show how in an early 1932 memorandum of three Harvard scholars, including Currie, and also Harry Dexter White, some non-Chicago economists were for both monetary and fiscal expansionary policies to get out of the Depression. The Chicago Memorandum also prioritized counter-cyclical fiscal policy. Prior to that, Senator Robert Wagner of New York introduced a bill for an Employment Stabilization Board that was supported by several economists including F. Knight, Sumner Slichter and Frank Taussig. For the differences

between later Keynesian ideas and the Chicago Tradition that emphasized fiscal activism in the short run, see Pérez Caldentey (2003).

- <sup>10</sup> Calomiris (2010) believes also that the Real Bills Doctrine was central in causing the Depression, but argues that the regulatory changes of the 1930s were designed to preserve it. In that case, it would be hard to argue that the Fed abandoned the Real Bills Doctrine in the 1930s.
- <sup>11</sup> This is obviously not a new phenomenon. See, for example, Laidler (1984) for a harsh critique of the misuse of the Real Bills Doctrine in modern discussions. Certainly the views that argue that the RBD involved a monetary contraction in order to stop speculation as sustained by Timberlake (see footnote 3 above) is from our point of view mistaken.
- <sup>12</sup> Some of the same issues of confusion about the role of the Real Bills Doctrine take place when discussing the role of the Quantity Theory in this same period, as in the famous debate between Milton Friedman and Don Patinkin on the so-called Chicago Tradition. Those confusions are the mirror ones, in a sense, of those related to the 'Real Bills Tradition.' For a recent take on the Chicago Tradition, see Laidler and Sandilands (2010).
- <sup>13</sup> For example, Thomas Tooke, one of the main authors of the Banking School and a defender of the Real Bills Doctrine, believed that interest rates, determined by the Central Bank, entered the cost of production, and, as a result of this direct relation between interest rates and prices, Central Banks could be quite influential. See Pivetti (1998) and Smith (2008) for an analysis of Tooke's views and some of their implications.
- <sup>14</sup> And, as a matter of fact, short-term nominal interest rates were reduced immediately after the 1929 crisis. Of course, deflation, and the zero-bound limit to nominal rates, implied that real rates were relatively high.
- <sup>15</sup> The same can be said *inter-alia* of other classical authors like Adam Smith, Henry Thornton and Karl Marx. For a discussion of classical views on money and output, see Green (1992).
- <sup>16</sup> Neo-Wicksellian ideas were popular among Cambridge economists like Dennis Robertson and Keynes in his *Treatise on Money*, as well as Ralph Hawtrey a Treasury man with Cambridge connections, but also with Austrians like Friedrich Hayek. The Neo-Wicksellian model has become popular again, as for example in the so-called Taylor Rule, with the so-called New Neoclassical Synthesis. See Goodfriend and King (1997).
- <sup>17</sup> Charles Goodhart (2010, p. 2), in his otherwise excellent review of the different eras of Central Banking, confuses the Real Bills Doctrine with the notion that the system is self-adjusting. He says: "the Real Bills Doctrine is wrong ... it assumes implicitly that the private sector is inherently self-stabilizing."
- <sup>18</sup> This understanding of the problems of debt-deflation is made clear in a radio address in response to Senator Byrd in 1939, where he said: "from 1929 to 1935, total debts, both public and private, contracted by 14 percent. Yet at the same time national income fell by more than 50 percent. As a result, the private debt structure, even though contracted, was so large in relation to the diminished national income that debts became insupportable. Hence, our entire financial structure collapsed and general economic paralysis resulted" (The Marriner S. Eccles Document Collection, FRASER, Economic Library and Archives; Radio Address, 1939, p. 6). Further, he knew that private debt was riskier than public debt, and that excessive private debt could lead to bankruptcy. Only public debt was free of default risk. In his words: "individuals and corporations may become bankrupt, but no nation, having the human and material resources of the United States, need impoverish itself by borrowing from itself. The only way that we can impoverish ourselves is by failing to utilize our idle man power, resources, productive facilities and money in the production of real wealth" (*ibid.*, p. 11).
- <sup>19</sup> Refinancing farm mortgages on a long-term basis at a low rate of interest was number 4 on his 5 point program to recover from the Depression, which he presented in his testimony to the Senate Finance Committee in February, 1933. Eccles' program consisted of increasing transfers to states, increase federal government spending, implement a program to control production and raise agricultural prices, refinance mortgages on a long-term basis at low rates of interest, and bring about a permanent settlement of inter-allied debts by promoting cancellation of debts (Vernengo, 2009). To achieve the goals he favored a unification and centralization of the banking system, which would take place with the 1935 Bank Act, high income and inheritance taxes, national child labor and minimum



wage laws, and, finally, unemployment insurance and old age pension laws, which were enacted with the Wagner and Social Security Acts.

- <sup>20</sup> For a discussion of the meaning of the pre- and post-Accord policies and their meaning from the point of view of the political economy of debtor-creditor conflict, see Epstein and Schor (1995).
- <sup>21</sup> The resemblance of these policies with the Quantitative Easing (QE) policies pursued by the Fed after the Great Recession of 2007 is inescapable. For a description of the circumstances that require QE, see Bernanke and Reinhart (2004).
- <sup>22</sup> All the English translations of Prebisch's Works (Vols. I to IV) are by the authors of this paper. Throughout the text, Prebisch's Works are cited as RP with the respective volume and page(s) number(s).
- <sup>23</sup> Prebisch would emphasize that his views differ from the British advisor Otto Niemeyer, the British Treasury expert that provided advise to the Argentine government, on the role the bank should play, and how his views were more akin to John H. Williams, a Harvard professor that would be influential in Eccles' Fed, who could understand the limitations under which the Argentine economy was operating, and the need for capital controls (Dosman, 2009, p. 122). It is worth noticing that Prebisch had translated one of Williams' books.
- <sup>24</sup> It is important to note that while Prebisch was developing Keynesian ideas adapted to the particular circumstances of peripheral countries, as a result of his participation in the conservative governments of the 1930s, his dismissal from the Central bank by the government of the 1943 military coup, and his troubled relation with the Peronist government (1946-55), in Argentina he would not be seen as particularly Keynesian or progressive, and his policy advise would be seen as contradictory to his international policy positions. Arturo Jauretche (1955), one of the organic intellectuals of the nationalist and popular left connected to Peronism, provides a scathing critique of Prebisch's economic plan for Argentina after the 1955 military coup. See Sikkink (1988).
- <sup>25</sup> In his *International Currency Experience* (1944, pp. 85 and 194), Nurske thought highly successful the policy of neutralization, mainly international reserve accumulation, pursued by the Central bank of Argentina. Triffin also entertained a similar opinion praising also non-orthodox instruments such as foreign exchange controls. Following a similar line of thought, in 1945, Prebisch helped to draft the legislation for the newly created Central bank of Paraguay and the reform to the existing system of foreign exchange controls. See also Helleiner (2009).
- <sup>26</sup> Prebisch had developed a theory of the foreign trade multiplier, which he saw as being in some respects similar to Keynes' analysis. Prebisch introduced around 1935 the concept of what he termed the 'coefficient of expansion' (RP, Vol. III, pp. 249-298; 301-310; 335-342; 349-370). It measured the intensity with which an increment in income, resulting from a given increase in exports or financial flows, produced an expansion of greater amplitude in domestic economic activity. For further discussion, see Pérez and Vernengo (2011).
- <sup>27</sup> Nowadays, in Latin America and elsewhere, proponents of capital controls base their case precisely on the argument put forward by Prebisch, that is, the change in the composition of financial inflows from short-term to long-term investment.
- <sup>28</sup> As he explains: "We are exposed, in our country, to rapid and unpredictable changes in the economic situation. We pass in a few months of transition from a moment of somber perspectives, such as in 1940, to the opposite situation... It suffices to reflect on what would have happened if the plan for construction [under the National Plan for Reactivation] would have been launched and to the resulting purchasing power would have been added a new purchasing power derived from the increase in exports: circulation would have expanded in an exaggerated manner, with the pernicious consequence that always follow" (Vol. IV, p.160).
- <sup>29</sup> Note that contrary to mainstream theory and practice, inflation and more specifically, a low and stable rate of inflation is not included, as part of the aims of monetary policy. Nonetheless, maintaining full employment and the highest possible rate of growth of output do inevitably lead to situations of inflation and output trade-offs. Throughout the period covered in this article, Prebisch never abandoned the orthodox belief that inflation is the product of fiscal deficits. See for example RP. Vol. IV, p. 229.

- <sup>30</sup> Following his departure from the Central Bank in 1943 and until his ECLA appointment, he remained committed to teaching and was also an international consultant. According to him, he began at this time re-thinking his past experiences and developing his periphery-center and development theories.
- <sup>31</sup> The particular examples in this section draw on the Paraguay and Dominican Republic cases.
- <sup>32</sup> See, Article 3 and 4 of the Decree-Law No. 5130 (September 1944), which created and organized the Bank of Paraguay.
- <sup>33</sup> According to Helleiner (2009, p. 18): "Triffin frequently cited his debt to Prebisch's 'pioneering work' in his publications..." Triffin thought that Prebisch's proposal on exchange controls was novel and interesting and of great value to the Federal Reserve mission in Paraguay. Haberler (1947) argued that Triffin's exchange control proposal wasn't an 'exchange control' but rather a 'temporary currency depreciation'. He attributes the invention of non-discriminatory exchange control to Prebisch. See also Triffin (1947b).

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