



Munich Personal RePEc Archive

# **Garrison's Capital-Based Macroeconomics: The Role of Deficit, Credit Control and Taxation**

Ferlito, Carmelo

INTI International College Subang, Subang Jaya, Malaysia, Institute  
for Democracy and Economic Affairs, Kuala Lumpur, Malaysia

25 June 2011

Online at <https://mpra.ub.uni-muenchen.de/67747/>

MPRA Paper No. 67747, posted 09 Nov 2015 05:44 UTC

□□□□□□

*Chapter 8*

**GARRISON’S CAPITAL-BASED MACROECONOMICS:  
THE ROLE OF DEFICIT, CREDIT CONTROL  
AND TAXATION**

*Carmelo Ferlito\**

**ABSTRACT**

It could be quite simple to argue that, in the realm of the Austrian School of Economics, public finance plays no role. However, the Austrian perspective is very wide and, starting from Hayek, it is possible to trace a path that arrives to Roger Garrison.

Garrison’s capital-based macroeconomics is the attempt to write a new general macroeconomics founded on time, expectations and capital. Starting from that basic graphic tool called *Hayek’s triangle*, Garrison tries to verify which instruments, in the field of political economy, are consistent with a sustainable growth. He considers the following cases: deficit finance, deficit spending (inert government projects, nationalized industries, infrastructures) and tax reform, recognizing a role to fiscal policy, but stressing the preference for a general institutional change.

Jel: B25, E32, E63

**INTRODUCTION**

Since the beginning, Austrian Business Cycle Theory (ABCT) developed in two different branches: the “pure” monetary approach of Ludwig von Mises (1912; 1936) that comes directly from Menger and Wicksell; and the semi-monetary approach of Friedrich A. von Hayek (1929; 1931; 1939), more complex and more influenced by Böhm-Bawerk’s capital theory.

---

\*

\* Scholar in History of Economic Thought and Economic History. His research interests focus on Austrian School of Economics, German Historical School, Business Cycle Theories and Banking History. Contact: [carmelo.ferlito@gmail.com](mailto:carmelo.ferlito@gmail.com).

These two addresses are today reflected in the works of Jesús Huerta de Soto<sup>1</sup> and Roger Garrison<sup>2</sup>. The latter builds up an analysis focused on the concept of intertemporal structure of capital; his starting point is Hayek's capital theory, in particular as developed in Hayek (1941), while his basic tool is the Hayek's triangle, presented in Hayek (1931, p. 9). Putting together all this elements with the introduction of expectations in the Austrian paradigm operated by Lachmann (1943; 1956), he develops the so-called *capital-based macroeconomics* (CBM).

I will try to explain the meaning of CBM in the first paragraph, while in the second one I will show how Garrison uses this tool to analyze the effectiveness of fiscal policy. In the last paragraph I will point out some link between Garrison's theory and Italian economic thought.

## **1. CAPITAL-BASED MACROECONOMICS: WHAT ARE WE TALKING ABOUT?<sup>3</sup>**

### **1.1. Time, Expectations and Capital**

The main aim of Garrison (2001) is to define a new and complete approach to macroeconomics that, starting from the Austrian tradition, could take into account the recent developments of economics. In particular, the new macroeconomics has to be centered on the concept of capital structure and constantly in dialectic relationship with other important veins of economic thought, Keynesism and monetarism<sup>4</sup>.

However, Garrison (2001) is only the final point of a reflection that started several years ago. In particular, Garrison (1978) is the first but almost complete draft of Garrison's thought. The Garrison's starting point is that «[s]omewhere between microeconomic principles and macroeconomic phenomenon lies a market process whose complexity imposes strict limits on macroeconomic theory – and even stricter limits on macroeconomic policy» (Garrison, 1992, pp. 165-6). Thus, there are two instruments that have to be used in order to successfully manage macroeconomics: capital and expectations. Both of the tools allow to deal with the third fundamental element of CBM: *time*<sup>5</sup>. All

---

1

Jesús Huerta de Soto is professor of Economics at Departamento de Economía Aplicada I, Facultad de Ciencias Jurídicas y Sociales, Universidad Rey Juan Carlos, Madrid. His most important work on business cycle theory is Huerta de Soto (1998).

2

Roger Garrison (1944, Joplin, Missouri) is currently professor in Economics at Auburn University, in Alabama. Maybe it is not so well known that the Ludwig von Mises Institute – the most important think-tank in Austrian economics – is based in Auburn.

3

On the general development of cbm see Cochran (2001).

4

On the relationship between Austrian economics and mainstream economics see Backhouse (2000) and Garrison (1989; 1991a).

5

Time is a crucial element of all Austrian economics. O'Driscoll and Rizzo (1996, pp. 133-58) set Newtonian time against real time. According to the authors, economics has to deal with a real time, not with a mathematical one. Such a conception of time involves a dynamic structure, implying memory and expectations. Moreover, the main consequences are that 1) real time is irreversible and 2) a creative evolution of knowledge and plans. All these factors imply that natural state of economy is the change.

Garrison's reflection is the attempt to put together capital, expectations and time to build a macroeconomics antithetical to mainstream approaches, both Keynesian and monetarist<sup>6</sup>.

Garrison (2001, p. 15)<sup>7</sup> observes that, during the time flow, the original means of production and the ultimate ends are linked by decisions of entrepreneurs. The market process shows that every entrepreneur is guided by past decisions of all the entrepreneurs and by expectations about the future decisions of consumers and other entrepreneurs. It is possible to see a network of plans; the concretization of these plans makes the *intertemporal structure of capital* to rise (Garrison, 2001, p. 33; 1984a, p. 305)<sup>8</sup>. Thus, it is important to not consider the capital as a stock. It means that what matters is the particular allocation of resources over time: resources can be devoted in production of consumers goods or investment goods. The intertemporal allocation, in every time, can be internally consistent or not, so it could be sustainable or not (Garrison, 2001, pp. 33-4). These are the elements through which Garrison chains his analysis with traditional ABCT.

Time is nothing but the *dimension* in which market process takes place. Economic process is not still. Expectations complete themselves through time. The coordination problem is a matter of time. Capital structure modifies through time. Reallocation of resources happens through time.

## 1.2. Graphic Tools

Garrison (2001, pp. 34-49) builds the scheme of his theory using three analytical (and graphic) instruments: the market for loanable funds, the production possibilities frontier and the intertemporal structure of production. The first and the second ones are well known for macroeconomists, while the third one is represented by the *Hayek's Triangle* (Hayek, 1931, p. 39).

Thus, the market for loanable funds allows to show the equilibrium interest rate, one of the fundamental tool in ABCT. In this market, demand is represented by investment, while supply, according with traditional Austrian perspective, by saving (Garrison, 2001, pp. 36-40). With the production possibilities frontier, Garrison (2001, pp. 40-5) sets against the fundamental trade-off between consumer goods and capital goods<sup>9</sup>. But the scheme starts with Hayek's triangle (Garrison, 2001, pp. 45-9; 1986a; 1994b).

---

6

The general approach of Garrison is firstly drafted in Garrison (1978; 1984a). Then, before arriving to Garrison (2001), we can find several papers devoted in explaining the line. The accent on capital theory can be found in Garrison (1984a; 1991b; 2005). The problem of expectations is treated in Garrison (1986b; 1997a). A general view of business cycle problem is presented in Garrison (1989; 1991a; 1997b).

7

Garrison is not the first Austrian economist dealing with the expectations. If it can be said that Mises underemphasized the role of expectations, Hayek (1933) tried to insert them in a writ that I consider his turning point in elaborating his business cycle theory. However, Lachmann (1943; 1956, pp. 20-34) and Shackle (1938; 1949) play the most important role in building up a new framework in which capital and expectations are columns for a development in Austrian theory. About expectations, Lachmann and Shackle are the foundations of Garrison's theory. On Austrian economics and expectations see Carilli and Dempster (2001) and Koppl (1999).

8

This concept is linked with the Austrian topic of time preference; see Huerta de Soto (2000), pp. 95-106 and O'Driscoll and Rizzo (1996), pp. 313-22.

9

This trade-off is used in business cycles theory since Marxian analysis.

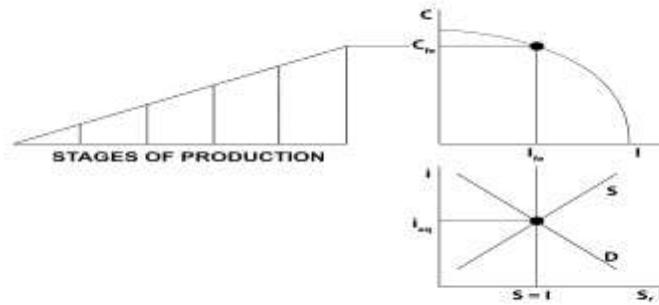


Figure 1. The macroeconomics of capital structure (Garrison, 2001, p. 50).

The attempt is to show the intertemporal structure of capital, using the basic Austrian concepts of ‘period of production’ and ‘roundaboutness’ of production<sup>10</sup>.

At a given point in time and in the absence of resources idleness, investment is made at the expense of consumption. Investment, which entails the commitment of resources to time-consuming production process, adds to the time dimension of the economy’s structure of production. To allow for investment, consumption must fall initially in both nominal and real terms. [...]

The relative length’s of the triangle’s two legs, then, represent the inverse relationship between nominal consumption spending and nominal non-consumption spending – the latter as reflected by the time dimension of the economy’s capital structure. (Garrison, 1994b, p. 110).

A production structure becomes more roundabout if consumption level lowers and time production increases. The shape of the triangle could change following a change in time preferences. For example, if consumers become more future-oriented, this means that their time preferences are lower than before and we can observe an increase in saving. But in the

Austrian formulation, saving means more than simply not consuming. Income earners do not just save; they save-up-for-something. [...] Increased saving in the Austrian formulation gets translated through market mechanisms and entrepreneurial foresight into higher demands for inputs in the relative early stages of production. The demand for output as a whole, then, is neither higher nor lower than before the preference change. Rather, the pattern of demand has changed in a way that is conveniently depicted by a Hayekian triangle whose consumer-spending leg has become shorter and whose production-time leg has become longer. (Garrison, 1994b, p. 111).

Looking at the graphic, it is immediately clear that the slope of hypotenuse reflects the level of interest rate; then, it is also clear that the change in time preferences described above brings out a lower interest rate (Garrison, 1994b, p. 111; 2001, p. 50).

---

10

«Roundaboutness is a concept featured in Austrian capital theory. Homely stories about the bare-handed catching of fish are a prelude to a discussion of the economy’s capital structure. The outputs of some stages of production become inputs to others. Production takes time. The capital structure, broadly conceived, has a temporal profile – one that can be modified in response to changes in intertemporal consumption preferences and resource constraints. This was the central message of Eugen von Böhm-Bawerk» (Garrison, 2004, p. 26).

### 1.3. The Problem of Sustainable Growth

ABCT is so well known that here I don't have to describe it analytically<sup>11</sup>. The central role is played by the manipulation of interest rate: if monetary rate<sup>12</sup> lies, for different reasons, below the natural rate<sup>13</sup>, investment decisions could be wrong, generating the boom and bust cycle. In general, Garrison (2001, pp. 56-83) uses the graphic framework seen above to show how it is possible to distinguish between sustainable and unsustainable growth. His point of view can be summarized as follow.

**Table 1. Sustainable and unsustainable growth**

Unsustainable growth	$i \downarrow - S \downarrow - I \uparrow$
Sustainable growth	$S \uparrow - I \downarrow - I \uparrow$

$i$  = monetary interest rate;  $S$  = Saving;  $I$  = Investment.

It means that the main way to generate a sustainable growth is a change in intertemporal preferences. This is described in Garrison (2001, pp. 61-7).

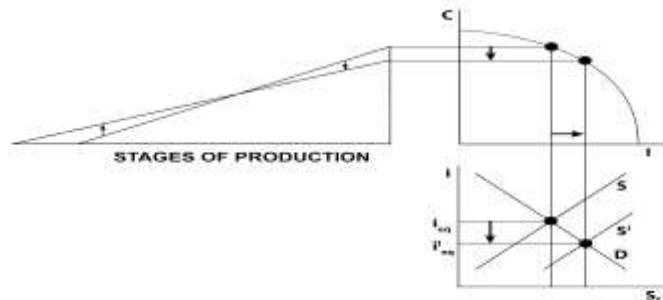


Figure 2. Saving-induced capital restructuring (Garrison, 2001, p. 62).

This is not the place to deep this argument. Unsustainable growth, generated by an artificial expansion of loan means, is described in Garrison (2001, pp. 67-76). The central point is that, if we

11

See, in particular, Hayek (1929; 1931; 1939) and Mises (1912; 1936; 2006).

12

The rate fixed by monetary authorities. It is the rate known by entrepreneurs, the one that guides them in bringing up investment decisions.

13

The natural rate of interest is the rate «that governs the allocation of resources between current consumption and investment for the future. By keeping saving and investment in balance, the natural rate guides the economy along a sustainable growth path. That is, governed by the natural rate, unconsumed current output (real saving) is used for augmenting the economy's productive capacity in ways that are consistent with people's willingness to postpone consumption» (Garrison, 2006, p. 58).

face with change in intertemporal preferences (i.e. increase in thriftiness), the direction of decisions of consumers and entrepreneurs is the same: if saving grows, the interest rate falls, pushing up the demand for funds for capital-intensive investment; resources to finance this demand can be found in the augmented saving; the resulting capital restructuring can be completed<sup>14</sup>.

These are the the basis of Garrison's macroeconomics. I explained them quite in detail because these are also the tools he uses for explaining the eventual possibility of a fiscal policy.

## 2. GARRISON AND THE FISCAL POLICY

Is there space for public finance in the Austrian perspective? It could be simple to answer that for Austrian economists government is only an obstacle in reaching the perfect equilibrium set out by market competition. But this answer is not correct. It's undeniable that, according to Mises, it is difficult to imagine that in ASE we could find the possibility of a public finance. But the position of other authors presents different shades. According to Hayek (1935, pp. 21-2), being against economic planning is not equal to say that the *present* capitalistic form is the better economic system. And, coming back to business cycle problem, Hayek concludes his last work on this stuff saying that if

we have to steer a car along a narrow road between two walls, we can either keep it in the middle of the road by fairly frequent but small movements of the steering wheel; or we can wait longer when the car deviates to one side and then bring it back by more or less violent jerks, probably overshooting the mark and risking collision with the other wall; or we can try to keep the steering wheel stiff and let the car bang alternately into either wall with a good chance of leading the car and ourselves to ultimate destruction. (Hayek, 1939, pp. 70-1).

Again, Hayek (1939, p. 63) states that during the depression, if the demand for consumers' goods falls too low, «supplementing demand by public expenditure may well be justified». And, against the classical Austrian perspective, he argues that in the long run deflation could be more harmful than inflation, so he «implicitly assumes that in some cases deflation should be prevented» (Bagus, 2003, p. 30). Following Bagus (2003), I can stress how Austrian perspective could become very interventionists concerning deflation.

I quoted Hayek here only to stress that Austrian position is not totally closed to fiscal and regulatory issues. Garrison (2001, pp. 84-106) uses his analytical tools in order to verify which instruments, in the field of political economy, are consistent with the sustainable growth. He considers the following cases: deficit finance, deficit spending (inert government projects, nationalized industries, infrastructures) and tax reform.

### 2.1. Deficit Finance

Garrison (2001, p. 85) starts asking if government borrowing is equivalent to taxing. He considers the hypothesis of an economy in which a portion of the public sector, that was tax-financed, becomes deficit-financed. In such a situation, the government, issuing additional debt, increases the demand for loanable funds, making the interest rate to rise. This fact brings out two consequences: on one hand,

---

14

On the contrary, the artificial boom induced by a lowering of interest rate (or by new monetary means) faces a contradiction between consumers and investors behaviour: while saving is discouraged, demand for investment grows and it is financed by virtual new credit.

the supply of loanable funds rises; on the other hand, we see a reduction in the demand for investment from private sector<sup>15</sup>. But less investment means more consumption.

The result is fully consistent with a common-sense understanding of the change in fiscal policy: the tax cut that accompanied the sale of securities is used in part to take advantage of the higher interest rate and in part to increase consumption. (Garrison, 2001, p. 86).

The new intertemporal structure of capital reflects this process: resources are reallocated away from the earlier stages of production and into the late stages; this is because consumption demand is higher. This reallocation is the result of deficit finance. This means that,

with a reduced rate of investment, the economy grows at a slower rate, impinging negatively on the consumable output available in the future. To this extent, the debt burden is shifted forward. (Garrison, 2001, p. 87).

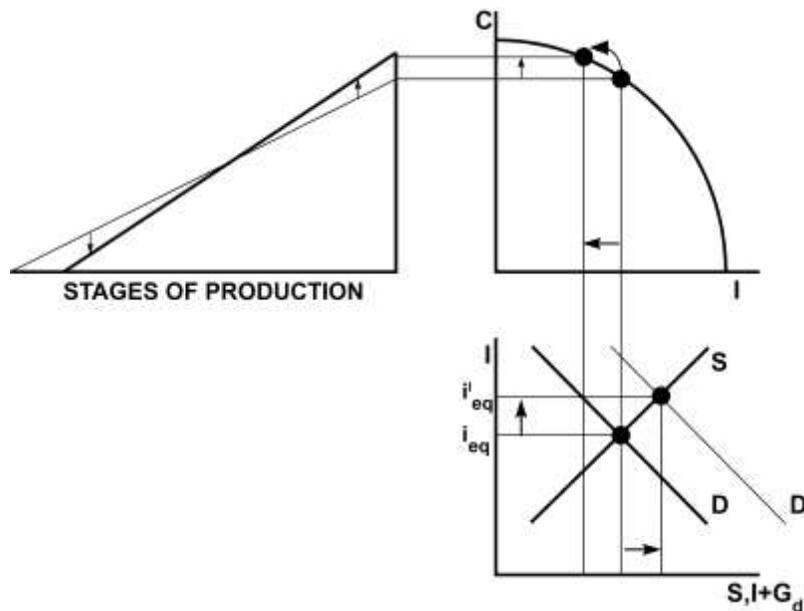


Figure 3. Deficit finance, shifting the debt burden forward (Garrison, 2001, p. 86).

Then, in general, the effect of deficit finance is to move the economy to another intertemporal equilibrium, more present-oriented than the first one. The final result is that economy growth rate is slower than before. In general, according to White and Garrison (1999, p. 8), is really important to stress that difference between deficit and taxes matters. This is because of two reasons. First, the «level of spending may in fact rise with the extent of deficit financing»; a larger deficit means lower taxes today on all taxpayers, shifting «some of the burden of current government spending onto future voters who are inadequately represented in today's borrowing decisions». This means that, in such a way, a higher level of government spending becomes politically palatable (White and Garrison, 1999, p. 8). The second reason is that borrowing can become an endless business, in particular if the debt is

15

This point is source of disputes between economists. In particular, White and Garrison (1999) replies to the perspective of Landsburg and Feinstone; according to Landsburg and Feinston, deficits do not affect interest rates. «Government borrowing indeed does not “consume money” in the sense of making the money stock shrink. But it does consume credit, and it does crowd out private borrowing» (White and Garrison, 1999, p. 5).

bought by Central Bank, that, monetizing it, creates distortions. In fact, there will be uncertainty about the time in which government will pay back and in which way (White and Garrison, 1999, p. 8). In such a way, the government borrowing pushes up the risk for private sector activities (Garrison, 1994a, p. 266).

Similarly, Garrison states, against Dwyer, that it is wrong to think that deficits play no role in determining inflation. The origin of dispute comes out from the fact that Dwyer redefines deficit as «the change in the real value of the debt» (Garrison, 1984b, p. 593); according to Garrison (1984b, p. 594), this is an analytical error, due to fail in distinguishing between comparative static and market dynamics. I cannot deep here the dispute, but Garrison concludes that if

debt is monetized in a given period because of the anticipation of even greater government borrowing in subsequent periods, then the monetary creation and the subsequent inflation should be attributed to deficits. The anticipation of large deficits, in his hypothetical case, causes money creation. (Garrison, 1984b, p. 596).

Commenting the enormous American deficit, Garrison comes back on this topic, stressing that, at that level of borrowing, the

effect of deficit will be:

- higher interest rates (if the government borrows domestically);
- increased inflation (if the Federal Reserve monetizes the debt);
- weakened export markets (if the government sells debt abroad);
- tax hikes [...]; or

all the above in some combination. (Garrison, 2003, pp. 3-4).

It doesn't matter where the resources for financing deficit come from. The situation is always negative. First of all, the government can borrow domestically (Garrison, 2001, pp. 113-4). In this case, Garrison (2001, p. 113) argues that, if individuals lend money to the government, then their saving is not available for private investment. Thus, demand for loanable funds that comes from government wins the competition against the firms:

High interest rates attributable to the government's excessive demand for funds "crowd out" private investors as well as consumers. (Garrison, 2001, p. 113).

The second possible situation is that the government borrows from the central bank. This is the classical example for money creation. The typical result is that the «increased borrowing and spending put upward pressure on prices and wages», generating an inflationary process; the following adjustment brings out «inequities, perversities, and inefficiencies» (Garrison, 2001, p. 114). Garrison adds that, if it's true that inflation reduces the real value of public debt, this is possible only under two circumstances: a large portion of the debt must be long-term due date, and the inflation must be largely unanticipated. But this is not the normal situation (Garrison, 2001, p. 114).

The last possibility is that government borrows in world capital markets, from foreign savers and foreign central banks. This situation brings out a negative effect in real economy: deficit in international trade. In fact, ordinarily two countries exchange goods for goods. But, in this case foreign investors trade goods for Treasury bills, so the national industries are seriously damaged by such a politics (Garrison, 2001, p. 115).

## 2.2. Deficit Spending

The case of deficit spending is treated in Garrison (2001, pp. 90-6). But Garrison considers different situations, according to different ways in which the government could decide to use the money.

### 2.2.1. Inert Government Projects

The first case Garrison takes into account is that government buys resources that otherwise would be bought by private investors. But the government uses this resources in «a remote and largely isolated military outpost», or for «building monuments to revered political leaders or fallen war heroes» (Garrison, 2001, p. 92).

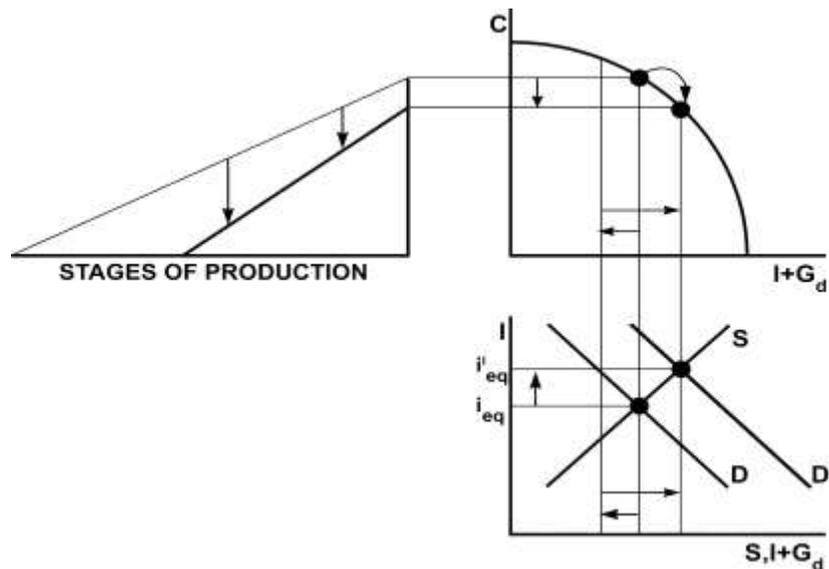


Figure 4. Deficit spending, borrowing to finance inert government project (Garrison, 2001, p. 91).

Needing money for deficit, government pushes upward the demand for loanable funds, so the interest rate rises. As seen before, this situation brings out a decrease in private demand for investment and a higher supply of loanable funds. But more saving means less consumption. So, in such a case, we face that, since the high interest rate encourages a reduction in production time, we have less consumption and less investment. In general, the economy grows more slowly.

### 2.2.2. Nationalized Industries

In this case, the resources that government uses are not related with the ones that remain in the private sector. This situation is quite peculiar; in fact, investment of State is not necessarily guided by market process. For example, government could invest in steel industry not only if interest rate is low. Anyway, its investment causes a higher interest rate. As we have previously seen, this fact brings away a reallocation of resources in favor of consumption; but this situation is quite different, because the nationalized investments preserve resources also inside the early stages of production. Obviously, doing this with a higher interest rate means causing losses, but avoiding losses is not the primary objective of government deficit spending; government could do this for favoring employment or for a “power policy”. The final result is not clearly predictable.

The general reallocation away from the early stages will be partially mitigated by considerations of derived demand and capital complementarity. If, despite cumulative losses, the steel is sold at its demand price, the increased supply of publicly produced steel may partially offset the effects of a high interest rate. (Garrison, 2001, p. 93).

The Garrison's conclusion about nationalized industries is open to different scenarios. In particular, he admits that in this case we face with non-market behaviors; therefore different elements get into the general decision about the possibility to nationalize some part of production.

To the extent the nationalized industries dominate our analysis, our subject matter shifts away from the macroeconomic relationships that govern a market economy to the economics and politics of resource allocation in a non-market setting. The issues of economic growth, business cycles, and deficit spending give way to the issue of economic calculation in a socialist society. (Garrison, 2001, p. 94).

We know that the problem of economic calculation in a socialist society was deeply analyzed by Mises (1949, pp. 685-711) and Hayek (1935).

### 2.2.3. Infrastructures

The last case that Garrison (2001, pp. 94-6) considers is linked with infrastructures.

Suppose the government spends its borrowings on infrastructure (highways, waterways, airports, and utilities) or on other programs that may have some public-goods character. [...]

Let us suppose initially that the government (somehow) reallocates resources to the provision of infrastructure in the same way as the market itself would reallocate them if only it could (somehow) overcome the free-rider problem. By its very nature this use of resources adds disproportionately to the early stages of production. Infrastructure is, by and large, early-stage fixed capital. (Garrison, 2001, p. 94).

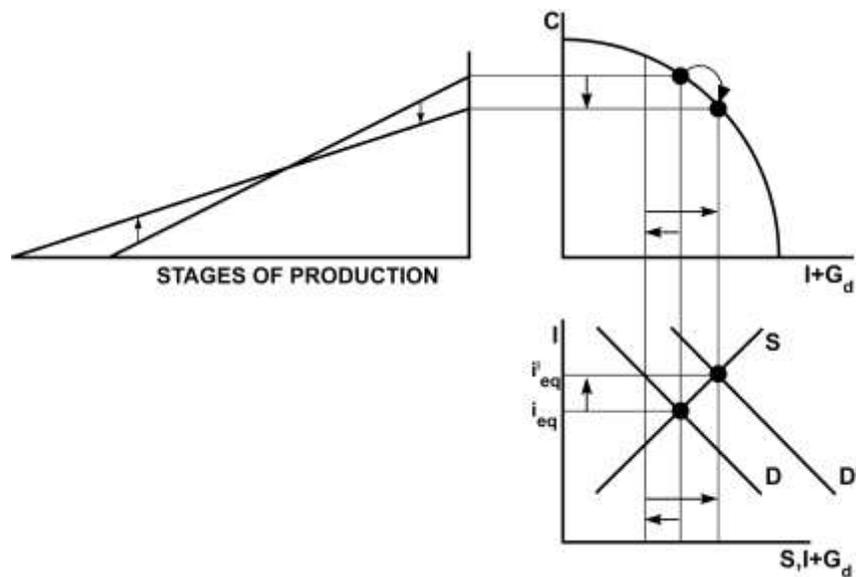


Figure 5. Deficit spending, borrowing to finance infrastructure (Garrison, 2001, p. 95).

The economic system moves toward a higher rate of interest and increased production time. This could seem non-consistent with what we saw before. On one hand it is true that the higher interest rate discourages, in private sector, time-consuming processes, so that many private resources are

reallocated into late stages of production. But, on the other hand, the government spending on infrastructure causes a shift of resources into the early stages. The government action moves against the market: it borrows at a high interest rate and spends money in time-consuming projects. Moreover, it could happen that someone, in private sector, will follow the government action, «if considerations of capital complementarity are sufficiently favorable» (Garrison, 2001, p. 95).

So, in this case, economy will experience an increase in its growth rate, if «the effects of overriding the market process and overcoming the free-rider are substantial enough» (Garrison, 2001, p. 95). But this conclusion «depends critically on the government being able to allocate resources as if it were a market relieved of its free-rider problem» (Garrison, 2001, p. 95).

Thus, concluding the section devoted to deficit spending, Garrison (2001, p. 96) states that

the effects of this fiscal policy cannot be summarily described in terms of the spending alone. Taking into account the higher interest rate still leaves us short of a summary conclusion. Because of the explicit attention to the time element in the economy's structure of production, capital-based macroeconomics must also take into account the intertemporal dimension of the government's spending programs.

### **2.3. Tax Reform**

Concerning the possibility of tax reform, Garrison (2001, pp. 102-6) considers the hypothesis of a shift from an income tax to a consumption tax. The effect of this kind of reform is firstly represented in a modification of private sector PPF.

The consumption intercept will move toward the origin, reflecting reduced after-tax consumption possibilities; the investment intercept will move away from the origin, reflecting tax-free investment possibilities. Equivalently, the generally decreased slope of the PPF reflects the fact that tax reform of this sort changes the intertemporal trade-off in favor of investment. (Garrison, 2001, pp. 102-3).

So, we see an increase in the amount of both saving (loanable funds supply) and investment (loanable funds demand), with no movements in the interest rate, because the increase is induced by tax. What we finally see is an increased rate of economic growth. Using the typical ASE and CBM lexicon, we can state that «the increased growth due to tax reform is sustainable growth» (Garrison, 2001, p. 104). This is because no modification in interest rate occurs. The tax reform changes the intertemporal system of preferences, as shown by the new PPF. Then, the adjustment brought out by tax reform, according to Garrison, will not have a boom-bust character. And the modification in Hayekian triangle is carried out in accordance with saving-induced changes in the interest rate, as we saw in figure 6.

The key point here is not tax reform in itself, but the possibility to reduce consumption *not modifying the interest rate*, but allowing a natural change in time preferences. Garrison (2001, p. 104) stresses that «it is precisely the reduction of consumption that makes a higher growth rate possible». Under this perspective, it's undeniable that the common opinion that growth comes out from stimulating consumption is completely false, because

stimulating consumption during the transition by means of, say, a transfer expansion may be counter-productive. Again, if the net effect of the transitional dipping down and of the transfer expansion is actually to leave consumption spending unchanged, then the supposed beneficial effects of more rapid growth would be negated. (Garrison, 2001, p. 105).

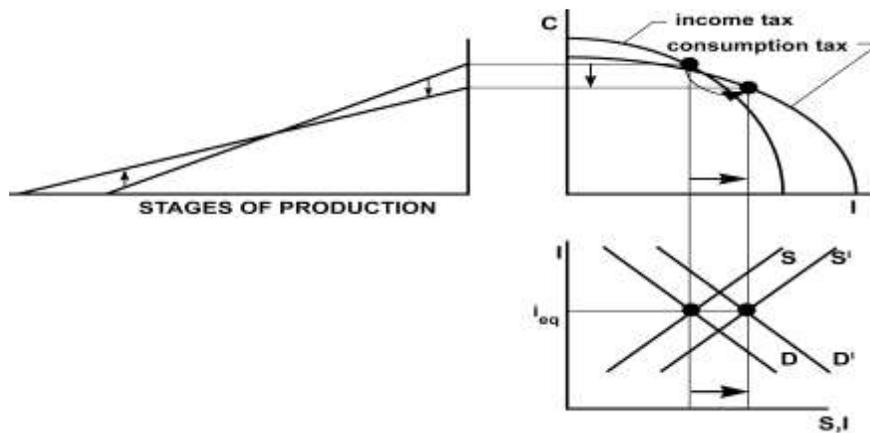


Figure 6. Tax reform, from an income tax to a consumption tax (Garrison, 2001, p. 103).

This is not the only Garrison's proposal. Garrison (1996) supports the idea of the introduction of a flat tax. This comes out from his criticism against the present fiscal system. According to Garrison (1996, p. 674), «we have a big, complex and inefficient, progressive tax». But complexity and inefficiency are not due only to progressiveness. The tax is complex and inefficient because *big*. Thus, «the smaller the tax, the greater the prospects for simplicity and efficiency. And a flat rate may be the best means of keeping a small tax from becoming a big one» (Garrison, 1996, p. 674).

### 3. ITALIAN LINKS

Garrison's perspective is deeply rooted inside the Austrian tradition; but, according to Gehrke and Kurz (2001, pp. 170-1), we can clearly recognize an Italian influence on such tradition, in particular on Böhm-Bawerk. This Austrian economist himself refers to Galiani and analyzes in deep the thought of Galiani in chapter 3 of his *Geschichte und Kritik*.

Concerning the link among interest rate, business cycle and government role, the situation is quite complex (Nardi Spiller, 2010). We have to think about a history of mutual relationships and influences, that shaped the Austrian theory and made it possible to become what it presently is. First of all, we have to think about Enrico Barone (Hagemann and Rösch, 2001, p. 189). In 1908 he published a paper, *Il Ministro della produzione nello stato collettivista*, that Hayek really appreciated and wanted to translate for publishing on his collection *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism* (1935). The Barone's perspective can be considered an important contribution in the debate on the economic possibility of socialism and planning, a debate that started with Mises's article *Economic Calculation in the Socialist Commonwealth* (1920). Barone's paper, completely based on prices and quantity analysis, is in line with the Austrian point of view, in particular concerning the preference analysis, really important in Garrison's thought. Moreover, Barone draws a business cycle theory really close to the Spiethoff's approach (Gioia, 2001, p. 307); and, in turn, Spiethoff's analysis is really close to Hayek (Ferlito, 2010, pp. 31-9).

Hayek liked also another Italian economist: Costantino Bresciani Turrone (Hagemann and Rösch, 2001, pp. 193-5); in his *Le vicende del marco tedesco* (1931) and *Kapitalmangel und Währungsstabilisierung* (1932), it is possible to note a general "Austrian" perspective on the problem of business cycle. In particular, one point makes Bresciani Turrone very close to the Hayek-Garrison path:

In contrast to Graham and later Gini [...] who stressed the beneficial effects of the inflationary process to the German economy, Bresciani Turrone rightly advocated the view that on balance the implications were clearly negative, particularly because inflation led to distortions in relative prices and subsequently in the structure of production and thereby became a source for later stabilisation crises, a conclusion which made his analysis very attractive for Hayek. (Hagemann and Rösch, 2001, p. 195).

In particular, thus, Bresciani Turrone can be linked to Hayek and Garrison when he stresses the importance of variation in the structure of production in the field of economic fluctuations (Pavanelli, 2000, p. 531).

It is possible to find also a deeper connection between Austrian tradition and Italian economics. It can be summarized with a name: Marco Fanno (Hagemann and Rösch, 2001, pp. 191-2. Nardi Spiller and Pomini, 2007). The starting point for ABCT is the distinction between natural and monetary interest rate. This analytical tool is at the root of all Garrison's analysis; but it comes to Garrison through Hayek and Mises; they, in turn, took it from Knut Wicksell. But Hayek developed his business cycle theory at the same time of Fanno; the Italian wrote his famous work on crises in 1931, but Fanno started in recognizing the Wicksellian distinction in 1912 (*Le banche e il mercato monetario*). Hayek (1931, p. 24n) understood how much important was the Fanno's opera and I can state that, in that period, Fanno was the only Italian economist able to write a business cycle theory starting from the same point of the Austrians: the Wicksell's distinction between natural and monetary interest rate. And such distinction is a column in Garrison's analysis. However, in Fanno we can find an important difference with the Austrian approach; during a heavy deflation process, according to Fanno, without government action, the system can be driven to a general fall down (Pavanelli, 2000, p. 539).

This story of influences can be described also referring to my specific analysis. Concerning directly the *public finance theory*, a very special topic in Italian economic thought, as well recognized by Buchanan (1960, p. 24), I have to follow Gioia (2003, p. 327), when he stresses that the so-called *Scienza delle Finanze* was the most important transmission channel for Austrian theory in Italy, in particular through the Italian debate turn on by *Grundlegung der theoretischen Staatswirtschaft* published by Sax in 1887. In the second half of XIX century, Italian economists were strictly involved in trying to use, in the *finances science*, the methodology and the theories of the new marginalist school (Gioia, 2003, p. 342). In particular, Ricca Salerno introduced in Italy the Sax's opera, turning on a very important debate. But after Ricca Salerno was Maffeo Pantaleoni that used the new value theory by Menger and Walras in tax theory, developing this attempt through the book by Sax in 1887 (*Teoria della pressione tributaria*) (Gioia, 2003, p. 342).

A general Austrian approach in public finance is used not only by Pantaleoni. According to Gioia (2003, p. 343), I can quote works by Ricca Salerno (*Scienza delle finanze*, 1890), U. Mazzola (*I dati statistici della finanza pubblica*, 1890), Conigliani (*Teoria generale degli effetti economici delle imposte*, 1890), A. Graziani (*Istituzioni di scienza delle finanze*, 1896). How was it possible this kind of success? The new approach allowed the Italian economists to explain the public finance phenomena under the light of a single explanatory principle: the marginal utility law. Moreover, the new perspective was a third way between two opposite approaches: the too much liberal one – against the public finance – of Ferrara and the German vision, according to which State is like a person, that can act and has specific tasks to do – against the “natural” market laws (Gioia, 2003, p. 343).

Thus, through the Austrian perspective, the Italian school of public finance was able to trace back every fact of civil life to the new value (subjective) theory, stressing the role of human action and of every single and *real* acting man. So, as Ricca Salerno and Graziani state, the needs of government are the needs of every single citizen and the public balance have to follow private criterions, according to the new value principles (Gioia, 2003, p. 344).

It is possible to use this peculiar reception of Austrian principles in Italy, linked with public finance school, in order to judge another aspect another aspect. It is known that, after the Great

Depression, Hayek tried to explain how it is wrong to use monetary policy as anticyclical instrument. This is the most important topic in all ABCT, until Garrison. Concerning economic policy, many Italian economists accepted the Hayekian perspective, refusing Keynesian prescriptions (Pavanelli, 2000, p. 524 and Realfonzo, 2000, p. 543). Under this point of view, it is really interesting the activity of Luigi Einaudi. In 1933, with the article titled *Il mio piano non è quello di Keynes*, Einaudi attacks Keynes and the plan to use liquidity for stimulated aggregate demand (Pavanelli, 2000, pp. 527-8).

Also Attilio Cabiati, in 1932, stresses how could be wrong the concept of *controlled money* (Pavanelli, 2000, p. 529), while Gustavo Del Vecchio can be considered the most important Italian advocate for another important Austrian topic: the role of excessive bank credits as cause of cycle (Realfonzo, 2000, p. 545). According to Del Vecchio, the rise in money quantity, caused by a banking lending that exceeds saving, brings out an increase in prices. Because of rigidity in labor market, this fact brings a redistribution in favor of profits, generating new profit expectations and thus a rise in investment. The cycle is then characterized by, in Hayekian terms, a more roundabout structure of production (Realfonzo, 2000, p. 545). This is a very important point in Austrian perspective, that Garrison often uses in building his scheme. Del Vecchio also shares with Bresciani Turrone the idea that the upper turn of the cycle can be caused by the exhaustion banks credit potential (Realfonzo, 2000, p. 554).

## CONCLUSION

At the end of this contribution, hopefully it is clear enough the actual possibility of speaking of fiscal policy also in accordance to the scope of the Austrian School of Economics. Roger Garrison, one of the most present advocates of Austrian tradition, uses an analytical framework to understand if the typical instruments of abct can be used to study the possibility of public interventionism.

Therefore, he stresses that different situations are possible. He concludes that *deficit finance* is always harmful for the economic development of a country. Instead, it is possible to find some good solution through *deficit spending*, but every single case has to be studied separately and the effectiveness of any action depends on government abilities.

In the end, the most powerful instrument in the hands of government is a *tax reform*, able to shift from income taxation to consumption taxation. Such a reform modifies the preferences system, bringing out a *natural* change in the intertemporal structure of production. The induced growth is, thus, sustainable.

I want to conclude with Garrison's words. These words stress one of the key points in Austrian analysis: the preference for a general institutional change, the only possibility to make their solutions realizable.

Here too the intended implications turn on the distinction between theory and policy. For policy, clearer recognition of the limits of macroeconomics strengthens the case for rules over discretion. It argues for the abandonment of policy activism in favor of institutional reform. If policy activism is unlikely to get the economy out of macroeconomic difficulties, institutional reform that, among other things, eliminates the threat of policy activism may well keep the economy from getting into macroeconomic difficulties. (Garrison, 1992, pp. 176-7).

## REFERENCES

- Backhouse, R. E. (2000). Austrian Economics and the Mainstream: View from the Boundary. *Quarterly Journal of Austrian Economics*, 3 (2), 31-43.
- Bagus, F. (2003). Deflation: When Austrians Become Interventionists. *Quarterly Journal of Austrian Economics*, 6 (4), 19-35.
- Buchanan, J. M. (1960). "La Scienza delle Finanze": The Italian Tradition in Fiscal Theory. In J. M. Buchanan, *Fiscal Theory and Political Economy. Selected Essays* (24-74). Chapele Hill (NC, USA): The University of North Carolina Press.
- Carilli, A. M., and Dempster, G. M. (2001). Expectations in Austrian Business Cycle Theory: An Application of the Prisoner's Dilemma. *The Review of Austrian Economics*, 14 (4), 319-30.
- Cochran, J. P. (2001). Capital-Based Macroeconomics: Recent Developments and Extensions of Austrian Business Cycle Theory. *Quarterly Journal of Austrian Economics*, 4 (3), 17-25.
- Ferlito, C. (2010). Crisi economica e andamento ciclico. In C. Ferlito, *Contro la crisi. Combattere la crisi, difendere il mercato* (21-51). Chieti (I): Solfanelli.
- Garrison, R. W. (1978). *Austrian Macroeconomics: A Diagrammatical Exposition*. Manlo Park (CA, USA): Institute for Humane Studies.
- Garrison, R. W. (1984a). Time and Money: The Universals of Macroeconomic Theorizing. *Journal of Macroeconomics*, 6 (2), 197-213.
- Garrison, R. W. (1984b). Deficits and Inflations: A Comment on Dwyer. *Economic Inquiry*, 22 (4), 593-6.
- Garrison, R. W. (1986a). Hayekian Trade Cycle Theory: A Reappraisal. *The Cato Journal*, 6 (2), 437-53.
- Garrison, R. W. (1986b). From Lachmann to Lucas: On Institutions, Expectations, and Equilibrating Tendencies. In I. M. Kirzner (Ed.), *Subjectivism, Intelligibility and Economic Understanding: Essays in Honour of Ludwig M. Lachmann on his Eightieth Birthday* (87-101). New York (NY, USA) and London (UK): New York University Press and Macmillan and Co.
- Garrison, R. W. (1989). The Austrian Theory of the Business Cycle in the Light of Modern Macroeconomics. *The Review of Austrian Economics*, 3, 3-29.
- Garrison, R. W. (1991a). New Classical and Old Austrian Economics: Equilibrium Business Cycle Theory in Perspective. *The Review of Austrian Economics*, 5 (1), 91-103.
- Garrison, R. W. (1991b). Austrian Capital Theory and the Future of Macroeconomics. In R. M. Ebeling (Ed.), *Austrian Economics: Perspectives on the Past and Prospects for the Future* (303-24). Hillsdale (MI, USA): Hillsdale College Press.
- Garrison, R. W. (1992). The Limits of Macroeconomics. *Cato Journal*, 12 (1), 165-78.
- Garrison, R. W. (1994a). The Roaring Twenties and the Bullish Eighties: The Role of Government in Boom and Bust. *Critical Review*, 7 (2-3), 259-76.
- Garrison, R. W. (1994b). Hayekian Trinagles and Beyond. In J. Birner and R. van Zijp (Eds.), *Hayek, Coordination and Evolution: His Legacy in Philosophy, Politics, Economics, and the History of Ideas* (109-25). London (UK): Routledge.
- Garrison, R. W. (1996). The Flat Tax: Simplicity Desimplified. *The Free Man*, 46 (10), 670-4.
- Garrison, R. W. (1997a). The Lachmann Legacy: An Agenda for Macroeconomics. *South African Journal of Economics*, 65 (4), 459-81.
- Garrison, R. W. (1997b). The Austrian Theory of the Business Cycle. In D. Glasner (Ed.), *Business Cycles and Depressions* (23-7). New York (NY, USA): Garland Publishing Co.
- Garrison, R. W. (2001). *Time and Money. The macroeconomics of capital structure*. London (UK) and New York (NY, USA): Routledge.
- Garrison, R. W. (2003). The Trouble with Deficit Finance. *The Free Market*, 21 (4), 3-4.
- Garrison, R. W. (2004). A Roundabout Approach to Macroeconomics: Some Autobiographical Reflections. *The American Economist*, 48 (2), 26-40.

- Garrison, R. W. (2005). The Austrian School: Capital-Based Macroeconomics. In B. Snowdon and H. R. Vane (Eds.), *Modern Macroeconomics: Its Origins, Development and Current State*. Aldershot (UK): Edward Elgar.
- Garrison, R. W. (2006). Natural and Neutral Rates of Interest in Theory and Policy Formulation. *Quarterly Journal of Austrian Economics*, 9 (4), 57-68.
- Gehrke, C., and Kurz, H. D. (2001). The spread of Italian economics in the German language area: 1750-1890. In P. F. Asso (Ed.), *From Economists to Economists. The International Spread of Italian Economic Thought, 1750-1950* (153-75). Firenze (I): Polistampa.
- Gioia, V. (2001). Le crisi economiche nelle analisi degli economisti italiani. Economia classica, marginalismo e marxismo. In M. E. L. Guidi, and L. Michelini (Eds.), *Marginalismo e socialismo nell'Italia liberale 1870-1925* (279-326). Milano (I): Feltrinelli.
- Gioia, V. (2003). Gli economisti italiani e la “scuola austriaca”: dalla teoria del valore alla scienza delle finanze. In P. Barucci (Ed.), *Le frontiere dell'economia politica. Gli economisti stranieri in Italia: dai mercantili a Keynes* (325-51). Firenze (I): Polistampa.
- Hagemann, H., and Rösch, M. (2001). The reception of Italian economic thought in Germany and Austria from 1900 to Second World War. In P. F. Asso (Ed.), *From Economists to Economists. The International Spread of Italian Economic Thought, 1750-1950* (177-207). Firenze (I): Polistampa.
- von Hayek, F. A. [1929] (1933). *Monetary Theory and the Trade Cycle*. London (UK): Cape.
- von Hayek, F. A. [1931] (1967). *Prices and Production*. New York (NY, USA): Augustus M. Kelly.
- von Hayek, F. A. [1933] (1975). Price Expectations, Monetary Disturbances and Malinvestments. In F. A. von Hayek, *Profits, Interest and Investment and Other Essays on the Theory of Industrial Fluctuations* (135-156). Clifton (NJ, USA): Augustus M. Kelly.
- von Hayek, F. A. [1935] (1963). The Nature and the History of the Problem. In F. A. von Hayek (Ed.), *Collectivist Economic Planning. Critical Studies on the Possibilities of Socialism* (1-40). London (UK): Routledge and Kegan Paul.
- von Hayek, F. A. [1939] (1975). Profits, Interest and Investment. In F. A. von Hayek, *Profits, Interest and Investment and Other Essays on the Theory of Industrial Fluctuations* (3-71). Clifton (NJ, USA): Augustus M. Kelly.
- von Hayek, F. A. (1941). *The Pure Theory of Capital*. Chicago (IL, USA): The University of Chicago Press.
- Huerta de Soto, J. [1998] (2006). *Money, Bank Credit, and Economic Cycles*. Auburn (AL, USA): Ludwig von Mises Institute.
- Huerta de Soto, J. [2000] (2003). *La Scuola Austriaca. Mercato e creatività imprenditoriale*. Soveria Mannelli (I): Rubbettino.
- Koppl, R. (1999). Expectations: Results from a Program in Subjectivist Economics. Unpublished paper.
- Lachmann, L. M. [1943] (1977). The Role of Expectations in Economics as a Social Science. In L. M. Lachmann, *Capital, Expectations, and the Market Process* (65-80). Kansas City (KS, USA): Sheed Andrews and McMeel.
- Lachmann, L. M. [1956] (1978). *Capital and Its Structure*. Kansas City (KS, USA): Sheed Andrews and McMeel.
- von Mises, L. [1912] (1999). *Teoria della moneta e dei mezzi di circolazione*. Napoli-Roma-Milano (I): Edizioni Scientifiche Italiane.
- von Mises, L. [1936] (2008). La teoria austriaca del ciclo economico. *Ibl Occasional Paper*, 60 (11).
- von Mises, L. [1949] (1998). *Human Action. A Treatise on Economics*. Auburn (AL, USA): Ludwig von Mises Institute.
- von Mises, L. (2006). *The Causes of the Economic Crisis. And Other Essays Before and After the Great Depression*. Auburn (AL, USA): Ludwig von Mises Institute.

- Nardi Spiller, C. (2010). Business Cycles in Italian Tradition. In C. Nardi Spiller, and M. A. Galindo (Eds.), *Issues in Economic Thought* (21-44). New York (NY, USA): Nova Publishers.
- Nardi Spiller, C., and Pomini, M. (2007). Profit rate, money and economic dynamics in Fanno's thought. In A. Giacomini, and M. C. Marcuzzo (Eds.), *Money and markets. A doctrinal approach* (222-37). London (UK) and New York (NY, USA): Routledge.
- O'Driscoll, G., and Rizzo, M. J. [1996] (2002). *L'economia del tempo e dell'ignoranza*. Soveria Mannelli (I): Rubbettino.
- Pavanelli, G. (2000). Note sulla teoria austriaca del ciclo e le sue implicazioni di politica economica nel dibattito italiano degli anni Trenta. In V. Gioia, and H. D. Kurz (Eds.), *Science, Institutions and Economic Development. The Contribution of "German" Economists and the Reception in Italy (1860-1930)* (521-41). Milano (I): Giuffrè.
- Realfonzo, R. (2000). Note sulla teoria austriaca del ciclo e gli economisti italiani nel periodo tra le due guerre. In V. Gioia, and H. D. Kurz (Eds.), *Science, Institutions and Economic Development. The Contribution of "German" Economists and the Reception in Italy (1860-1930)* (543-60). Milano (I): Giuffrè.
- Shackle, G. L. (1938). *Expectations, Investment and Income*. New York (NY, USA): Oxford University Press.
- Shackle, G. L. (1949). *Expectations in Economics*. Cambridge (MA, USA): Cambridge University Press.
- Spiethoff, A. [1925] (2002). Business Cycles. In H. Hagemann (Ed.), *Business Cycle Theory. Selected Texts 1860-1939*, Vol. II: *Structural Theories of the Business Cycle* (109-205). London (UK): Pickering and Chatto.
- White, L. H., and Garrison, R. W. (1999). Do Deficits Matter?. *The Free Market*, 17 (2), 5-8.