

Maes, Ivo

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## The spread of Keynesian economics: a comparison of the Belgian and Italian experiences

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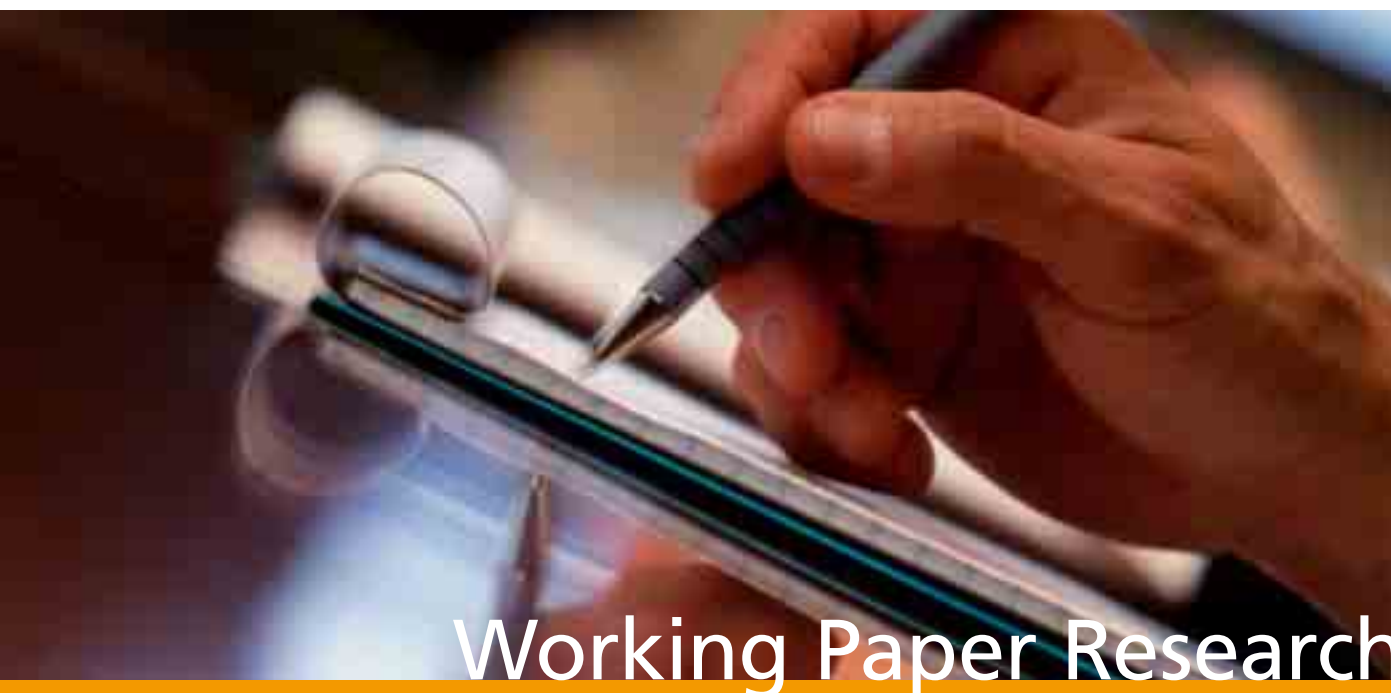
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The spread of Keynesian economics:  
a comparison of the Belgian and  
Italian experiences



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by Ivo Maes

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## **Abstract**

Keynesian economics dominated economic thought and macroeconomic policy-making in the 1950s and 1960s. However, the diffusion of Keynesian economics has been uneven. In this paper, we compare the spread of Keynesian economics in two continental European countries: Belgium and Italy. We focus on the post-World War II period, taking as the main message of Keynesian economics that the market is inherently unstable and that the government has a key role in economic life in steering effective demand. We further follow Coddington's distinction between "hydraulic", "disequilibrium" and "fundamentalist" Keynesianism. The study shows that Belgium and Italy were two countries where Keynesian economics gained ground only relatively late. The breakthrough of (hydraulic) Keynesianism came in areas which were close to the policy-making process: setting up national income accounts, the construction of macroeconomic models and correcting regional imbalances. The main difference between the two countries was the strong position of fundamentalist Keynesianism in the academic world in Italy, while in Belgium, disequilibrium Keynesianism was more influential.

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### **Corresponding author:**

NBB, Research Department, e-mail: ivo.maes@nbb.be

National Bank of Belgium, de Berlaimontlaan, 1000 Brussel, ivo.maes@nbb.be, Robert Triffin Chair, Université catholique de Louvain and University of Leuven. The author would like to thank all those who contributed to this project, especially J.-P. Abraham, S. Bertholomé, E. Buyst, P. Ciocca, A. Gigliobianco, H. Famerée, J.-C. Koeune, M. Pisu, L. Quaglia, J. Smets and I. Visco. The usual caveats apply.

The views in this paper are those of the author and do not necessarily reflect those of the National Bank of Belgium.

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## 1. INTRODUCTION

Keynesian economics dominated economic thought and macroeconomic policy-making in the 1950s and 1960s. However, the diffusion of Keynesian economics has been uneven (Coats, 1996, Hall, 1989). In this paper, we compare the spread of Keynesian economics in two continental European countries: Belgium and Italy. It were two countries were Keynesian economics gained ground only relatively late and which, moreover, were characterised by significant regional imbalances. The purpose of the study is to get a better understanding of the factors determining the dissemination of economic ideas, both in the academic world and in policy-making.

In this paper, we do not go into the debate as to how the General Theory (or other works of Keynes) was received in Belgium or Italy. We focus on the post-World War II period and on "Keynesian economics", taking as the main message of Keynesian economics that the market is inherently unstable and that the government has a key role in economic life in steering effective demand. We further follow Coddington's distinction between "hydraulic", "disequilibrium" and "fundamentalist" Keynesianism. Coddington (1976) characterises the "fundamentalist" Keynesian approach by a rejection of neoclassical microeconomic theory and general equilibrium theory. Cambridge (UK) was its main centre. The "hydraulic" approach centres on the belief that there are stable relations among the various flows in the economy, which provide a basis for active government policy. Important elements of the hydraulic approach were also the "revolutions" in national income accounting and econometrics (Patinkin, 1976). Econometric model-building was its core activity. In Europe, Tinbergen played a seminal role, also in the world of economic policy-making. The "disequilibrium" approach<sup>1</sup> tries to reconcile Keynesian ideas with general equilibrium theory, trying to bring it back to the core of mainstream economics<sup>2</sup>. This tendency is primarily associated with the work of Clower and Leijonhufvud. In this approach, the focus is on situations in which the market is not in equilibrium and on the ensuing process of trading at disequilibrium prices and quantity adjustments.

Italy and Belgium were two countries where Keynesian economics gained ground only relatively late not only in comparison with the United Kingdom or the United States, but also compared to several continental European countries like the Netherlands or the Scandinavian countries. In this paper, we investigate the main elements which were important in the spread of Keynesian economics in Italy and Belgium. In the first three sections, the focus is on the similarities between Belgium and Italy: a strong position of neo-classical (Austrian) economics in academic life, slowing down the penetration of Keynesian ideas; the breakthrough of "hydraulic" Keynesianism, with special attention paid to the role of the Organization for European Economic Co-operation (O.E.E.C.); the

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<sup>1</sup> Coddington calls it "reconstituted reductionism" as it is based on choice theoretic foundations, seeking to reconcile Keynesian economics and general equilibrium theory.

<sup>2</sup> Naturally, a drawback of the approach followed in this paper, of working with broad schools of thought, is that one does not do full justice to the, sometimes very subtle, contributions of individual economists. However, for this kind of broad article, there is not much of an alternative.

rise of Keynesianism in the poorer parts of the two countries, linking government intervention and regional imbalances. In the last section, we discuss the differences in the development of Keynesianism: Belgium was more in the mainstream of Keynesian economics, with disequilibrium economics becoming important in the 1960s, while in Italy, "fundamentalist" Keynesianism was much stronger.

## 2. THE DOMINANCE OF "LIBERAL" ECONOMICS IN THE EARLY POSTWAR PERIOD

In the 1940s, the mainstream of the Italian economics profession was profoundly steeped in the tradition of neo-classical economics, especially the general equilibrium version of Pareto and his disciples. It was also a school of political economy, strongly in favour of the free market economy, sometimes termed "the Italian liberal tradition" (Porta, 2000).

In the academic world, neoclassical economists were predominant<sup>3</sup>. Professors were mostly over fifty. They tightly controlled the job market, so that even economists under thirty-five or just over who wanted a chair or even a minor position in Italian academia were requested to profess a deep neoclassical faith (de Cecco, 1989). Keynes' popularity was restricted mainly to sections of the Italian economic profession he would have been ill at ease with: the corporatists and the Catholics.

In the area of business cycle theory, the Austrian theory was very influential in Italy in the 1930s and 1940s (Barucci, 2003). Italian economists worked in the tradition of the overinvestment theory, something which was in strong contrast with Keynes' oversaving theory. Moreover, Italian economists, like Luigi Einaudi, Costantino Bresciani Turroni or Giovanni Demaria, criticised Keynesian economics for its use of partial equilibrium analysis (instead of the Austrian general equilibrium approach). They also attacked its excessive aggregation, which did not recognise the microeconomic nature of economic variables<sup>4</sup>.

Following in the footsteps of its founding fathers, the Italian liberal school, together with the Bank of Italy, was closely involved in postwar economic policy-making. A key figure was Luigi Einaudi, who was governor of the Bank of Italy from January 1945 to May 1948. He restored the reputation of the Bank of Italy, which had been tarnished during the fascist regime. Also Donato Menichella, Einaudi's successor, was strongly convinced of the need for monetary stability in order to stimulate savings and, in this way, strengthen investment and the productive capacity of the economy.

Indeed, there was a large consensus among economists that the Italian economy was plagued by severe structural imbalances, especially high unemployment in the Mezzogiorno. So, Italian economists typically argued in favour of increased savings in order to build up the capital stock and

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<sup>3</sup> Corporatist ideas, promoted by the fascist regime, did not have a deep impact on the economics profession.

<sup>4</sup> For an analysis of Einaudi's views on Keynes (a complete rejection), see Lunghini, 2005. For an overview of the discussions in Italy on Keynes' work, see A.A.V.V., 1983.

combat unemployment. Moreover, they also accepted migration (to the North of Italy, but also to foreign countries like the United States or Argentine) as a way to equilibrate the capital/labour ratio. So, Keynesian ideas of demand management were greeted sceptically by most Italian economists, who were convinced of the structural nature of Italy's economic problems.

In the years after the Second World War, inflation was rampant in Italy, exceeding 100 p.c. between May 1946 and September 1947. In the summer of 1947, Einaudi became Finance Minister. His key objectives were to smother inflation and to restore balance of payments equilibrium. So, monetary policy was tightened sharply (the Banca d'Italia increased dramatically the monetary reserve ratios and raised the discount rate). Inflation came down quickly.

The Italian liberal school also played a role in the move towards liberalisation of exchange controls and trade restrictions in the postwar years. Giovanni Demaria's 1941 essay on the industrial problem in Italy was highly influential (Porta, 2000). It contained a strong condemnation of the fascist regime's trade policy, which had been based on autarchy since the early 1930s. Both for his academic standing and for the position taken at that stage, Demaria would later chair the works of the Economic Commission for the Assemblée Costituente, which was in charge of drafting a new Constitution for the first Italian Republic after the end of the war.

Italy's economic policies in the early postwar period were often criticised as being too restrictive. For instance, the *Economic Survey of Europe 1949* of the Economic Commission for Europe in Geneva singled out Italy, together with Belgium and Germany, as a country which followed deflationary policies (Baffi, 1985, 134). Also the US Economic Cooperation Administration often urged the Italian authorities to follow more expansionary policies, especially to combat unemployment. The Italian authorities, however, assigned a priority to the consolidation of monetary stability and the reconstruction of their foreign exchange reserves<sup>5</sup>.

The neo-classical tradition was strong in Belgium in the interwar period, too. But, unlike Italy, where general equilibrium analysis was dominant, in Belgium, Marshall's partial- equilibrium approach was also quite influential. Keynes was mainly known by the Belgians as the author of "*The Economic Consequences of the Peace*" (Keynes, 1919). His ideas on reparations payments were not very popular in Belgium, which had been invaded by Germany and had suffered badly from the war.

In the interwar period, the *Institut des sciences économiques*, at Leuven/Louvain University became the first "modern" research centre in economics in the Low Countries (Maes & Buyst, 2005). Léon-H. Dupriez soon came to be the dominant voice in the institute. Inspired by foreign research institutions, such as the Harvard Committee on Economic Research, he invested most of his energy

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<sup>5</sup> Italian authorities had still memories of the change of US policies after World War I, when US financial flows to Europe were suddenly interrupted. However, for the US authorities it was difficult to accept that Marshal Plan funds were used by Italy to build up its international reserves.



in business cycle analysis. His theoretical framework resembled that of Hayek's general equilibrium-oriented business cycle theories of the late 1920s (Hayek, 1928). Under the leadership of Dupriez, Leuven/Louvain economists gained international status in the 1930s. On several occasions, the *Institut des sciences économiques* - later called I.R.E.S.<sup>6</sup> - obtained grants from the Rockefeller Foundation.

In order to finance its theoretical research, I.R.E.S. produced business cycle analyses and forecasts, which were sold to private and (semi-) public corporations and institutions (Maes, Buyst & Bouchet, 2000). But the influence of I.R.E.S. on economic policy went far beyond that. Dupriez and several other members of the institute combined their academic career with an important position at Belgium's central bank. Moreover, several members, like Albert-Edouard Janssen and Paul van Zeeland, occupied key positions in different governments.

Immediately after World War II, Dupriez published his *magnum opus* "*Des mouvements économiques généraux*" (Dupriez, 1947). This book became very influential in France and Belgium, and to a lesser degree in Germany. So, at the French-speaking part of Leuven/Louvain University, business cycle analysis remained a top priority for Dupriez and I.R.E.S. Meanwhile, however, (hydraulic) Keynesianism had conquered mainstream (macro)economics on the international scene. Dupriez always resisted this trend as, in his opinion, the Keynesian approach lacked solid microeconomic foundations. Moreover, he favoured a general equilibrium approach, rejecting Keynes' partial equilibrium method. So he continued to work in the tradition of the Austrian school (Loewenthal and Siaens, 1972). Dupriez's attitude slowed down the penetration of Keynesian ideas in Belgium and particularly at (the French-speaking part of) Leuven/Louvain University.

Postwar economic policies in Belgium were also very much in line with the classical orthodoxy. At the heart of this policy-making was the so-called "Gutt operation" of September 1944, named after the then Belgian Finance Minister Camille Gutt. The basic problem was the enormous increase in the volume of banknotes in circulation, due to the heavy cost of financing the war. Under the Gutt operation, the money supply was cut drastically. Banknotes of 100 francs or more ceased to be legal tender. They had to be deposited and above a certain minimum, these deposits were frozen. With this operation, the monetary overhang in the economy was wiped out<sup>7</sup>. This also made it possible to abolish price controls and to restore the mechanisms of the free market economy.

Under the governorship of Maurice Frère, from 1944 to 1957, the National Bank of Belgium strongly adhered to orthodox monetary views. They were resumed in Governor's Frère's remarks to Finance Minister Janssen: "if you keep a firm hand on the State expenditure tap and I do the same for credit, nothing can go basically wrong" ("*si vous contrôlez fermement le robinet des dépenses de l'Etat et*

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<sup>6</sup> I.R.E.S. stands for Institut de recherches économiques et sociales.

<sup>7</sup> Belgian policy-makers were haunted by the trauma of high inflation and currency crises after World War I, when the monetary overhang had not been eliminated.

*moi celui du crédit, rien d'essentiel ne peut tourner mal*" - as quoted in Janssens, 1994, 265). Frère was also strongly in favour of a strong *franc* and opposed any devaluation of the Belgian franc. Moreover, in 1957, he succeeded in pushing through a law establishing a "metallic" statute for the Belgian currency: the franc was defined as a certain quantity of gold and the gold coverage of the banknotes was re-established<sup>8</sup>.

It is also important to note that, both in Belgium and Italy, the "internationalisation" of the economics profession was stimulated by the existence of fellowships. In Italy, there were the Bonaldo Stringher fellowships, awarded by the Banca d'Italia from the 1930s onwards. Initially, the Italian Fellows went mainly to Great Britain, especially Cambridge (Sraffa), Oxford and the LSE. From the 1960s and 1970s onwards, the Fellows went increasingly to the United States, especially MIT (Modigliani). So, many of Italy's most prominent economists, like Paolo Sylos Labini, Augusto Graziani, Luigi Spaventa or Luigi Pasinetti, studied abroad with these fellowships. In Belgium, the so-called CRB fellowships made it possible, from the early 1920s onwards, for young Belgian economists to study in the United States of America. The Commission for Relief in Belgium (CRB) was established in 1914 in the United States, in order to save Belgium from starvation during the German occupation. After the war, the remaining funds were used to set up several scientific and educational foundations. One of them was the Belgian American Educational Foundation (BAEF), which awarded the CRB fellowships to promising young Belgians to study at top American universities. Many future economics professors, such as Paul van Zeeland, Gaston Eyskens, Robert Triffin, and Jacques Drèze, went to the US with a CRB fellowship<sup>9</sup>. From the late 1920s, it gave economics in Belgium a distinctly American flavour.

### **3. THE SLOW RISE OF "HYDRAULIC" KEYNESIANISM**

By the time the Second World War ended, Keynes' analysis had become the "new economics" in the Anglo-American world. A crucial factor hereby was the "digestion" of Keynesian economics, especially the appearance of its neoclassical version, as developed by Hicks and Modigliani. Moreover, "hydraulic" Keynesian models made the understanding and acceptance of Keynesian ideas easier. Macroeconomic model-building became the new fashion in economics. It was a crucial element of *"The Keynesian Revolution"* (Klein, 1966).

Keynesian economics was also very influential in the US Economic Cooperation Administration and the Organization for European Economic Co-operation (O.E.E.C.). European countries thus came into contact with it, as it were, "on the shields" of the victorious Allied armies (de Cecco, 1989). With the division of the world into two blocs and the start of the Cold War, Keynesian economics became the political economy of those who wanted to contain communism. In Europe - so the reasoning

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<sup>8</sup> Also Einaudi in Italy had a certain nostalgia for a monetary system based on gold.

<sup>9</sup> It is remarkable that most of the CRB fellows returned to Belgium. The main exception was Robert Triffin (Maes and Buyst, 2005).

went - a large number of workers were unemployed. Being without a job, they were likely to lose faith in democracy and free enterprise. Unemployment had therefore to be reduced as fast as possible. And since it was attributed to a lack of effective demand, demand had to be pushed up by monetary expansion and public works. Moreover, on a more practical level, the O.E.E.C. played a crucial role in the development and dissemination of systems of national accounts (Van der Wee & Dancet, 1986). Indeed, the primary task of the O.E.E.C. was the distribution of the Marshall Plan funds. This had to be done on the basis of the respective needs of the various countries. So, it was important to measure the "wealth" of the different countries. For this reason, an internationally comparable system of national accounts was indispensable. The O.E.E.C. put a lot of effort into this topic and published, in 1950, the first international manual for the compilation of national accounts.

However, Keynesian economics had a hard time getting established in Italy (Bini & Magliulo, 1999). The older generation of Italian economists was solid in its defence of neoclassical economics. But the reconciliation of Keynesian methodology and neoclassical principles worked its magic in Italy, as it had elsewhere. Italian economists grasped the chance of being technically *au courant*. The first books explaining Keynesian economics in Italian appeared in 1948 and 1949. The authors were Vittorio Marrama<sup>10</sup> and Ferdinando di Fenizio<sup>11</sup>. They put the emphasis on the new analytical techniques and methodology of Keynesian economics. Also, with the extension of the intellectual exchanges between Italy and the Anglo-Saxon world, the pull of Keynesian economics on young economists became much greater than before the war (see, for example, Sylos Labini, 1949). Moreover, by the early 1960s, most of the economists who were Keynes' contemporaries were out of the game. So Keynesian economics, as formulated by Hicks, Hansen, Modigliani, and their many followers, became the new orthodoxy. A new generation of Keynesian-oriented professors became prominent.

As regards economic policy-making, Keynesian ideas and terminology gained ground more rapidly, largely under the impulse of the O.E.E.C. In Italy, a key role was played by the Interministerial Committee for the Reconstruction (Comitato interministeriale per la Ricostruzione, CIR)<sup>12</sup> which coordinated the studies and analyses for the O.E.E.C. As already mentioned, one of the key demands of the O.E.E.C. was for a system of national accounts. So, at the end of the 1940s, the Italian authorities produced a first set of national accounts (Rey, 2004, 124). Moreover, many negotiations were conducted with the help of input-output tables, based on the industrial survey for 1936-1938 and elaborated at SVIMEZ (the association for the development of industry in the Mezzogiorno, see below). So, with the discussions on the reconstruction, economists and statisticians employed by the government, the Bank of Italy, public and private firms or banks, became familiar with national accounting methods. As a result, official documents concerning

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<sup>10</sup> For assessment of the role of Marrama, see Caffè, 1987 and Gandolfo, 1987.

<sup>11</sup> Di Fenizio also played a critical role in the diffusion of Keynesian economics as the editor of "L'Industria", an old Milanese journal which he transformed and used to diffuse pragmatic Keynesian ideas (Faucci, 2004, 53).

<sup>12</sup> In 1967 it was transformed in the Interministerial Committee for Economic Programming (Comitato Interministeriale per la Programmazione Economica, Cipe).

economics and economic policy began to be drafted in the new terminology and started to use Keynesian concepts.

Keynesian ideas were gaining ground in the postwar period at the Bank of Italy, too, even if the liberal free market tradition remained important. New recruits in the Research Department, like Federico Caffé<sup>13</sup> and Salvatore Guidotti<sup>14</sup>, were more Keynesian oriented. The neo-classical tradition nevertheless retained its importance. A key figure was Paolo Baffi<sup>15</sup>. Baffi knew Keynesian theories quite well. However, he was sceptical of government intervention in the economy (Gigliobianco, 2006, 323).

International links, especially with the United States, were important in the breakthrough of "hydraulic Keynesianism" at the Bank of Italy. Keynesian methods of analysis received a boost with the return from the United States of Salvatore Guidotti in 1949. He was the head of the division responsible for production and price analysis in the research department and had been to the Department of Commerce in Washington to study the techniques of the national income accounts<sup>16</sup>. At the beginning of the 1960s, under the governorship of Guido Carli, the Bank of Italy started with the construction of a macroeconomic model. Guido Rey became responsible for the real side of the model and Antonio Fazio for the monetary part. Rey went for a study visit to the Dutch Central Planning Bureau, where Tinbergen was the director. Fazio went to MIT, to study with Franco Modigliani, not only because he was an Italian and a famous monetary economist, but also for his experience with the creation of the FED-MIT model. In the mid-1960s, Franco Modigliani also became a consultant to the Bank of Italy, to advise it on building its econometric model (Modigliani, 1999)<sup>17</sup>. The Banca d'Italia maintained further strong international academic connections, also because many of the Bank's economists studied abroad. It is further noteworthy that, in the 1960s and early 1970s, most of the international contacts of the Bank of Italy were with "moderate Keynesians", like Hicks, Samuelson, Modigliani, Klein or Tobin (Ciocca, 2004, 592).

In Belgium, hydraulic Keynesianism broke through at the French-speaking University of Brussels, due to the personality of Etienne Sadi Kirschen. As a Belgian representative at the Organization for European Economic Co-operation (O.E.E.C.), Kirschen had become familiar with "hydraulic Keynesianism". He used this experience and his background as an engineer to start up a quantitative and Keynesian-inspired research programme on the Belgian economy.

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<sup>13</sup> Caffé started working at the Bank of Italy in 1937. In 1945 he was the head of cabinet of Meuci Ruini, the Minister for the Reconstruction.

<sup>14</sup> Before joining the Bank of Italy, in 1949, Guidotti had also worked at the Naples branch of IRI. He published, together with Giuseppe Cenzato, one of the founders of SVIMEZ, one of the first postwar studies on the industrial problem of the Mezzogiorno (Cenzato & Guidotti, 1946).

<sup>15</sup> Baffi started working at the Research Department of the Bank of Italy in 1936. He was governor from August 1975 to October 1979.

<sup>16</sup> The study visit was paid by funds for technical assistance in the framework of the Marshall Plan (Appunto per il comm. Sartoretti, Archives, Bank of Italy, ASBI, Servizio Personale). Guidotti was also a consultant to the Interministerial Committee for the Reconstruction in matters of national income accounts and programmes for Italian imports.

<sup>17</sup> For a description of the model of the Bank of Italy, see Rey, 2004, 131.

Kirschen's research immediately hit a serious problem: a nearly complete lack of reliable Belgian national accounts. This was also a problem for the Belgian government, as the O.E.E.C. was asking Belgium for its official national accounts (Van der Wee & Dancet, 1986, 151). In 1949, a Commission for the National Accounts had been officially established. However, it was not making much progress. Indeed, the Belgian National Institute for Statistics lacked the necessary means, both financially-speaking and in terms of personnel. The almost total absence of Keynesian influences in Belgium in the early postwar period, as well as a lack of political will, go a long way towards explaining this situation.

So, Kirschen, who was not a member of the Commission for the National Accounts, assembled his own team to set up a system of national accounts. This also comprised "representatives" of the main Belgian institutions (Ministry of Economy, National Bank of Belgium, etc.). With the help of the O.E.E.C. and the Dutch and British statistical offices, Kirschen's team succeeded in 1953 in providing a full set of Belgian national income estimates (comprising the three approaches: income, production and expenditure, Kirschen et al., 1953). After some, often heated, discussion, Kirschen was taken up in the official Commission. However, things advanced only when Gaston Eyskens (an economics professor at the Dutch-speaking part of Leuven/Louvain University and an early, pragmatic Keynesian, see below) became prime minister in 1959. The next year, seven statisticians were recruited all in one go. Work on the national accounts was speeded up and the first input-output tables were drawn up.

Meanwhile, Kirschen had also institutionalised his research group with the creation of DULBEA (the Département d'Économie Appliqué de l'Université Libre de Bruxelles) in 1956 and the foundation of a journal, the *Cahiers économiques de Bruxelles*, in 1958. Typical for Kirschen and DULBEA was the empirical and policy-oriented nature of their research. Kirschen was described as "not an economic philosopher; he was really an economic statistician" ("*pas un philosophe de l'économie, c'était vraiment un statisticien de l'économie*" - Sirjacobs, 1997, 80). Kirschen's applied macroeconomic research brought him into contact with Jan Tinbergen as well. From the late 1950s, Tinbergen was to become a highly influential person at the University of Brussels<sup>18</sup>. Kirschen's research agenda in the 1960s showed a strong Tinbergen-flavour: macroeconomic modelling and the theory of economic policy (Buyst, Maes et al., 2005). Researchers at the University of Brussels developed several econometric models, not only of the Belgian economy, but also for Europe and the world economy. One of the highlights of their research was the publication, in 1964, of "*Economic policy in our time*" (Kirschen et al., 1964).

Kirschen's modelling activities brought him further into contact with other European colleagues. It led, in March 1961, to the establishment of the European Scientific Association for Medium and Long Term Forecasting (ASEPELT)<sup>19</sup>. The aim of ASEPELT was to group European researchers

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<sup>18</sup> He received an honorary Ph.D. in 1959 and taught a course from 1960 to 1966 (Sirjacobs, 1997, 100).

<sup>19</sup> Association Scientifique européenne pour la Prévision économique à Moyen et Long Terme.

active in medium- and long-term forecasting. Kirschen became the first president. In 1969, ASEPELT founded a journal: the "*European Economic Review*". Jean Waelbroeck and Herbert Glejser, both at the ULB, were the first editors.

Keynesian economics gained ground in the 1960s at the French-speaking section of the University of Leuven/Louvain, too, while Dupriez's influence declined. Michel Woitrin, a student of Dupriez, who had studied in Cambridge (UK) and had worked at the O.E.E.C., played an important role in introducing the new concepts and theories of hydraulic Keynesian economics. In the 1950s and 1960s he taught a, very Keynesian, course on macroeconomics. Also Alexandre Lamfalussy, who had gone to Oxford for his dissertation played a role. Lamfalussy was quite critical of postwar Belgian economic policy. He argued that: "the restrictive economic policy bears some responsibility for the slower pace of development of the Belgian economy" (Lamfalussy, 1961, 28). He raised the issue that "internal demand could have been increased through higher Government spending, and a devaluation could have put an end to the competitive disadvantage of Belgian industry" (Lamfalussy, 1961, 29). In 1966, Albert Kervyn, the first Secretary-General of the Belgian Bureau de Programmation Économique (from 1959 to 1965) and, for thirteen years, the chairman of the Working Party on Medium-term Perspectives of the European Economic Communities, became a professor at the francophone part of Leuven/Louvain University. He was deeply engrained in the world of macroeconomic modelling and hydraulic Keynesian economics.

Meanwhile, Keynesian economics was also gaining ground at the National Bank of Belgium. New recruits of the Research Department, like Roland Beauvois<sup>20</sup> or Godelieve Van Poucke<sup>21</sup> were much more Keynesian oriented. Their influence would grow, especially after the departure of Governor Frère in 1957.

It is further important to note that the basic macroeconomic paradigms with regard to the exchange rate were rather different in Belgium and Italy (Maes & Quaglia, 2003). In Belgium in the post-war period, the small open economy framework dominated economic thought and policy-making. There was, both among policy-makers and academics, a broad consensus on a policy of a stable exchange rate<sup>22</sup>. The exchange rate was furthermore an important element to instil discipline on the economy. In Italy, in the second half of the twentieth century, Anglo-Saxon ideas, which regarded the exchange rate as an instrument of economic adjustment, were running high<sup>23</sup>. This was the case both for neo-Ricardian and neo-Marxian tendencies, very influential amongst academic

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<sup>20</sup> See, for example, the note "Rapport du groupe d'experts constitué par le secrétaire général de l'O.N.U. sur les 'Mesures d'ordre national et international nécessaires pour réaliser le plein emploi'" of 09/02/1950, by Beauvois (Archives NBB, B564/1).

<sup>21</sup> Van Poucke was a pupil of Gaston Eyskens (the dominant figure at the Flemish University of Leuven). Van Poucke's doctoral thesis was on the theme of business cycle policy and public works. Her thesis was in the IRES tradition of business cycle analysis. However, she paid a lot of attention to the work of Keynes. Moreover, she concluded her work arguing in favour of a degree of "planning" in the economy (Van Poucke, 1942, 213).

<sup>22</sup> The main exception was early 1980 when the Belgian economy was suffering from a lack of competitiveness, high unemployment and balance of payments and budget deficits.

<sup>23</sup> This went hand in hand with theories that emphasised structural differences in inflation rates between countries (Abraham, 2003, 55).

economists, as for the "neo-classical" tradition, which was strongest in the North, especially at Bocconi in Milan, and at the Banca d'Italia. So in Italy, economists, in line with Anglo-Saxon thinking, tended to regard the exchange rate more as an instrument of economic adjustment.

#### **4. REGIONAL IMBALANCES AND THE RISE OF KEYNESIAN ECONOMICS**

An important similarity between Belgium and Italy is also that Keynesian economics gained ground earlier among economists in the poorer parts of the country. In both countries, the older generation, based in the richer part of the country (like Dupriez in Belgium or Einaudi and Bresciani Turrone in Italy), resisted Keynesian ideas, while a younger generation who wanted to improve the performance of the regions lagging behind (Flanders in Belgium, the Mezzogiorno in Italy) was in favour of more interventionist Keynesian ideas.

In Italy, the breakthrough of Keynesian economics can only be understood in conjunction with the unequal development between Southern and Northern Italy and the idea of planning. A key figure here was Pasquale Saraceno (Parisi & Rotondo, 1999). He was an expert in banking and business. During the 1930s, he worked in the IRI, Italy's state holding company<sup>24</sup>. By the mid-1940s, he was taking part both in the drafting of industry financing plans for the European Recovery Programme and in studies and plans concerning the problem of economic backwardness in Southern Italy. Saraceno aimed above all at finding concrete policies to cure the structural diseases of the Italian economy. His framework of analysis was strongly Keynesian (see, for example, Saraceno, 1949). One of his key concerns was the "import leak". Saraceno was fully aware that external financing was needed in order to avoid stronger economic growth leading to balance of payments problems.

Pasquale Saraceno was also the first Secretary-General of SVIMEZ (l'Associazione per lo sviluppo dell'industria nel Mezzogiorno, an association to promote the development of industry in Southern Italy, founded in December 1946). Several of its founding fathers (like Menichella, the governor of the Banca d'Italia) had been connected with Italy's state holding company IRI (SVIMEZ, 2006). Saraceno remained the driving force behind it for thirty years. The main objective of SVIMEZ was to study the problems of industrial development in Southern Italy and to draw up concrete programmes to strengthen it. More specifically, SVIMEZ wanted to analyse how industrial development might be stimulated, especially by speeding up some branches of industrial production, by mobilising available local resources and also by providing new capital and technical innovations from outside. Keynesian models were seriously and frequently studied and applied at SVIMEZ. Also, Keynesian growth theories, especially those of Harrod and Kaldor, were widely discussed (Magliulo, 2003). Furthermore, people working at SVIMEZ drew inspiration from the Anglo-Saxon literature of the 1930s on "depressed" areas. So they favoured public investment as a

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<sup>24</sup> IRI was then the leading "think-tank" in Italy. For instance, also Donato Menichella and Guido Carli, who, later, both became governor of the Bank of Italy, worked for IRI (see also Ricciardi, 2007).

means of compensating for the absence of "agglomeration economies" in the Mezzogiorno<sup>25</sup>. Moreover, they argued that such a programme of public investment would generate a continuous stream of demand for industrial products of the North. It was an ingenious way of reconciling the needs of the North with those of the South and this in a Keynesian analytical framework.

Saraceno's work led to the so-called Vanoni plan or Vanoni-Saraceno plan, which was approved by the government in December 1954<sup>26</sup>. The main objectives were full employment (and the creation of 4 million jobs), balance of payments equilibrium and reducing the North-South economic divide. Key elements of the plan were an increase in investment, some sort of economic planning (supported by both public and private investments) as well as strengthening integration between backward non-industrialised regions and the more developed areas.

The Mezzogiorno problem would also determine the Italian position for the Treaty of Rome negotiations. For Italy, it was of crucial importance to reconcile the common market with the Vanoni plan (see, for example, Doc. 65 in Ballini & Varsori, 2004). So, Italy insisted on "strict parallelism" in the free movement of goods, services, labour and capital. It hoped that, in this way, it would not only have a safety valve for its labour surplus, but also to attract foreign direct investment. In addition, it wanted deliberate government policies to tackle regional imbalances, favouring the establishment of a European Investment Bank (for investment in less-developed regions) and of a European Social Fund (for the redeployment of workers). The launch of the European Economic Community thus became a project in which both the "liberals" and the Keynesian economists in Italy could find common ground, as it involved both the creation of a common market and flanking government policies.

In Belgium, Keynesian economics initially gained ground at the Dutch-speaking (or Flemish) section of the Catholic University of Leuven/Louvain, in contrast to the Francophone one, which was dominated by Dupriez. The basic policy problem for Flemish economists, from the late 1940s to the early 1960s, was the high unemployment rate in Flanders. In the early 1950s, the male jobless rate stood at 10 p.c. and the female rate was 15 p.c. (Abraham, 1972, 321). Flanders accounted for 70 p.c. of total Belgian unemployment (but only made up 55 p.c. of the population). Like economists at SVIMEZ, Flemish economists were inspired by American regional economics and American measures to revitalise depressed areas (Neessens, 1957). Flemish economists also accepted labour mobility as a way to combat unemployment<sup>27</sup>. But they argued in particular for a more interventionist regional policy to fight unemployment. Flemish economists were not able to develop these ideas within the framework of I.R.E.S., as Dupriez not only rejected Keynesianism, but also strongly disapproved of government intervention in the economy. Linguistic quarrels further

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<sup>25</sup> SVIMEZ was considered as a stronghold of left-wing Christian Democrats, "who had (even in their corporatist days) always been favourable to Keynesian ideas" (de Cecco, 1989, 223).

<sup>26</sup> It was also strongly supported by Menichella, the governor of the Bank of Italy (Gigliobianco, 2006, 240).

<sup>27</sup> Gaston Eyskens even considered permanent emigration to Wallonia as one of the remedies (Abraham, 1972, 321). Also, already in the interwar period, Eyskens was strongly in favour of European integration, see Duchenne, 2006.



poisoned the atmosphere, so that Flemish economists at Leuven/Louvain University decided, in 1955, to set up their own research institute, called the Center for Economic Studies.

So, Keynesian economics became popular among the Flemish economists. In 1952, at the first Post University Lecture Series, Karel Pinxten (together with Gaston Eyskens, the standard bearer of the Flemish economists), gave a lecture on Keynesian economics. He argued that: "The appealing new content of the theory as well as the disrupted economic situation, which still persists, together constitute the two pillars supporting the influence of the Keynesian revolution on economic thought and economic policy". (*"Samen met de aangrijpende nieuwe inhoud van de theorie vormt de ontwrichte economische toestand, die nog steeds voortduurt, de twee pijlers waardoor de invloed van de Keynesian Revolution op het economisch denken en op de economische politiek wordt geschraagd"* - Pinxten, 1952, 266.) Together with the spread of Keynesian economics, more and more Flemish (as well as French-speaking) economists became convinced of the merits of (indicative) programming. For instance, it was the main theme of the fifth congress of Flemish economists in 1961, with also the participation of "foreign" (non-Flemish) economists like Tinbergen and Kirschen.

Gaston Eyskens, the leading economics professor at the Dutch-speaking section of Leuven/Louvain University, also had a strong impact on economic policy-making in Belgium<sup>28</sup>. He was a prominent member of the Christian Democratic Party and held several ministerial positions. In the periods 1958-1961 and 1968-1972, he was prime minister, and, in that capacity, he pushed through important economic reforms. During the first of these two periods, he passed a successful Regional Development Act, closely based on the Center for Economic Studies' policy recommendations. In addition, he established the Bureau voor Economische Programmatie/Bureau de Programmation Économique (1959). Its main functions were to give the government professional advice in economic policy matters, to improve tools for policy-making and to prepare medium-term economic plans and projections. But, as soon as Eyskens had left office, interest in the Bureau diminished. When he returned to power, he transformed it into the Planning Bureau (1970). Despite all these efforts, political support for the initiative remained limited (Van Waterschoot, 1975).

The process of European integration, with first the creation of the European Coal and Steel Community in 1952 and, then, the European Economic Community in 1958, provided a project in which both liberal and Keynesian economists could find common ground and a common objective (Abraham, 1972). The Treaty of Rome project, with its goals of free movement of goods, services, capital and people (in which tariffs and quotas would be abolished) had a strong free-market flavour. However, there were also "flanking" policies (agriculture, co-ordination of macro policies). The beginnings of a common market in the 1960s coincided with a period of strong economic

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<sup>28</sup> See Nédée (1975) for an overview of the economic philosophy of Gaston Eyskens. Also already in the interwar period, Eyskens was strongly in favour of European integration, see Duchenne, 2006.

growth (both in Belgium and in Italy)<sup>29</sup>. So, free-market economists and Keynesians found one another in a "holy alliance", around the ideas of economic growth and European integration, leaving opportunities for both free-market solutions and catalysing government policies.

##### **5. A STRONG "FUNDAMENTALIST" SCHOOL IN ITALY, A STRONG POSITION FOR "DISEQUILIBRIUM" KEYNESIANISM IN BELGIUM**

In Italy, the fundamentalist wing of Keynesian economics became quite influential, at least in comparison with most other countries. It fits in with a more left-wing leaning of Italian society. Examples are the strong position of the Communist Party and strong Marxian influences in the economics profession (Porta, 1997). The Italian Left had sympathy for Keynes, as he showed the inherent weakness of capitalism and the irresistible tendency towards a planned economy. But the Italian communists did not espouse Keynes. They did not feel the need to enrich their cultural endowment of Marxian origin with elements of Keynesianism (Bini and Magliulo, 1999). In an article published in the journal *Critica Economica*, Joan Robinson tried to prove that Marx and Keynes are not irreconcilable and that, together, they can strengthen the economic culture of the Left. However, Antonio Pesenti, the leading economist of the Italian Communist Party, disagreed. He replied that there is no possible compromise: Marx intended to overcome capitalism, whereas Keynes wanted to rescue it.

A special place in Italian economics is held by Piero Sraffa. Sraffa was born in 1898 and studied in Turin. He wrote a honours thesis on "Monetary inflation in Italy during and after the war", with Luigi Einaudi as supervisor (Newman & Panico, 1987, 445). In 1921-1922, he studied at the London School of Economics and during that time, he became a friend of John Maynard Keynes. He was also a close friend of Ludwig Wittgenstein and Antonio Gramsci. In 1927, he was offered a lectureship in Cambridge and emigrated to the United Kingdom<sup>30</sup>. However, he also kept good contacts in Italy. So was he a member of the Academia dei Lincei. Moreover, he was a frequent visitor of the Quirinale, when Einaudi was president (Gigliobianco, 2006, 213). Given also the strong position of the Left in Italian society, it is not surprising that Sraffa, especially his "*Production of Commodities by Means of Commodities*" (1960), had a strong influence back home (see also Bellofiore, 1986).

"*Keynes dopo Sraffa*" (Keynes after Sraffa) became quickly a dominant theme in Italian economics. The works of many Italian economists, a prime example being Luigi Pasinetti, can be considered as attempts to reconcile (fundamentalist) Keynesian economics with the work of Sraffa. The key idea was to place the principle of effective demand on a "production scheme", as elaborated by Sraffa (and earlier by Smith, Ricardo and the classical economists), while discarding the paradigm of an

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<sup>29</sup> Also in the academic world had attention shifted from stabilisation policies towards growth theory, with seminal contributions from Harrod, Domar and Solow.

<sup>30</sup> Naturally, he is also famous for his edition of the collected writings of David Ricardo.

exchange economy, of which the Arrow-Debreu general equilibrium model had become the quintessence (Pasinetti, 1999).

Furthermore, in Italy, issues like growth and income distribution, together with the dual nature of the Italian economy, dominated the scene. So, through the work of Luigi Pasinetti and other economists, the Cambridge equation, and more generally the message of the Cambridge School came to be very lively and influential in the country. In particular, the link between income distribution and savings, as established by the Cambridge School, came to play a central role in many discussions on economic growth in Italy.

From the early 1960s, in Belgium, like in Italy, a new generation of economics professors came to the fore. Most of them had studied in the United States, which gave these young professors an incentive to explore the international academic scene. So, in the course of the 1960s, Dupriez's influence on the francophone economics department of Leuven/Louvain University declined rapidly, while Keynesianism, in its different varieties, blossomed. Even "fundamentalist Keynesianism", and other types of left-wing economics, acquired a certain popularity, especially after the events of May 1968.

From the late 1960s to the 1990s, Jacques Drèze was undoubtedly the dominant figure in Belgian economics (Maes & Buyst, 2005). After graduate studies in the US, he became a professor at the University of Leuven/Louvain. On the theoretical front, his contributions to "disequilibrium Keynesianism" were highly influential in Europe. In 1966, he set up the Center for Operations Research and Econometrics or C.O.R.E., together with some Flemish and French-speaking colleagues. Somewhat later, the University of Brussels joined the initiative<sup>31</sup>. C.O.R.E. immediately took an explicit international course. In 1968, C.O.R.E. received a big impetus when Drèze succeeded in obtaining an important grant from the Ford Foundation. In subsequent years, C.O.R.E. became the first economics research institute on the European continent where science was set up as a business enterprise.

C.O.R.E. developed a broad spectrum of scientific activities, comprising econometrics, operations research, mathematical programming, game theory and mathematical economics. Researchers at C.O.R.E. made important contributions in the field of mathematical economics and game theory, especially to the theory of equilibria of a large economy. Arrow and Hahn (1971) refer in this respect to a "Belgian school". Later, attention shifted to price rigidities, and "the microeconomic foundations of macroeconomics" was for some time a big theme (Hildenbrand, 1989). Applied general

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<sup>31</sup> Despite Drèze's efforts, the inter-university character of C.O.R.E. weakened rapidly. In the late 1960s, Leuven/Louvain University was split up along linguistic lines. After a vote, C.O.R.E. chose to join the French-speaking side (Université Catholique de Louvain or U.C.L.) and moved to Louvain-la-Neuve in the mid-1970s. About the same time, but for financial reasons, official co-operation with the University of Brussels (U.L.B.) came to an end. At a personal level, however, many links with both the Dutch-speaking University of Leuven and the U.L.B. remained intact (Maes, Buyst and Bouchet, 2000).

equilibrium modelling received a boost by the blending of the University of Brussels' strength in econometric models with C.O.R.E.'s expertise in general equilibrium theory.

In Belgium, C.O.R.E. has been criticised for being too "academic" and "international" and not producing concrete practical studies on Wallonia. However, Drèze also investigated actual economic problems, especially unemployment. He put them in a theoretical framework, very much in line with "disequilibrium Keynesianism", as comes clearly to the fore in his presidential address to the European Economic Association: "Underemployment equilibria: from theory to econometrics and policy" (Drèze, 1987). As with so many Belgian economists, much of his policy work has to be put in a European context. So Drèze was a member, and later chairman, of the Macroeconomic Policy Group of the Centre for European Policy Studies (CEPS).

## **6. CONCLUSION**

In the decades following the Second World War, Keynesian economics dominated economic thought and macroeconomic policy-making. However, the spread of Keynesian economics has been rather uneven. In this paper, we compared the development of Keynesian economics in two continental European countries: Belgium and Italy.

There were very important similarities between Belgium and Italy: (1) a strong position of neo-classical (Austrian) economics in academic life, which slowed down the penetration of Keynesian ideas; (2) international organisations, especially the Organization for European Economic Co-operation, played an important role in the breakthrough of "hydraulic" Keynesianism; (3) the rise of Keynesianism especially among economists who were concerned with the poorer parts of the countries, linking government intervention and regional imbalances. The most important difference was that Belgium was largely in the mainstream of Keynesian economics (hydraulic and disequilibrium Keynesianism), while in Italy "fundamentalist" Keynesianism was much stronger, especially in the academic community.

Belgium and Italy were two countries where Keynesian economics gained ground only relatively late. The breakthrough came in areas which were more closely related to the policy-making process: correcting regional imbalances, setting up national income accounts and building macroeconomic models. In both countries, the creation of the European Economic Communities provided a common project for free-market economists and Keynesians. It led to a "holy alliance" around the ideas of European integration and economic growth. This was cemented by the strong economic performance of both countries in the 1960s.

This study further shows that there were more similarities between economists in Belgium and Italy who were involved in the policy-making process than between those in the academic world. A reason is probably that economists involved in policy-making are more focused on understanding

the "real" world. This fitted in with hydraulic Keynesianism, with its focus on national income accounts and econometric model-building. Moreover, there were quite frequent contacts among economists in the policy-making process, especially through the O.E.E.C. In the academic world, the development of Keynesian economics was quite different. While Belgium was mainly in the mainstream of Keynesian economics, in Italy fundamentalist Keynesianism was much more influential. So, the developments in academic economics were more in line with the general orientation of society (e.g. more to the left in Italy). Also the international academic contacts were quite different: in Belgium they were stronger with the US, while in Italy links with Cambridge UK were more influential.

## References

Archives: Banca d'Italia.

National Bank of Belgium.

A.A.V.V., 1983, *Keynes in Italia*, Firenze: Banca Toscana.

Abraham, J.-P., 1972, Van regionale tewerkstelling tot leefbare wereld. Economische perspectieven toen en nu, in Dondeyne A. (ed.), *Gelovend in de wereld*, Antwerpen: Patmos.

Abraham, J.-P., 2003, *Monetary and Financial Thinking in Europe - Evidence from Four Decades of SUERF*, Vienna: SUERF.

Arrow, K. and Hahn, F., 1971, *General Competitive Analysis*, San Francisco: Holden Day.

Baffi, P., 1985, Via Nazionale e gli economisti stranieri, 1944-53, in Baffi, 1990, *Testimonianza e ricordi*, Milano: Libri Scheiwiller, pp. 93-151.

Ballini, P.L. & Varsori, A., 2004, *L'Italia e l'Europa (1947-1979)*, Soveria Mannelli: Rubbettino.

Barucci, P., (ed.), 2003, *Le frontiere dell' economia politica*, Firenze: Edizione Polistampa.

Bellofiore, R., (ed.), 1986, *Tra Teoria Economica e Grande Cultura Europea: Piero Sraffa*, Milano: Franco Angeli.

Bini, P. & Magliulo, A., 1999, Keynesianism in Italy. Before and after the General Theory, L. Pasinetti & B. Schefold (eds.), *The Impact of Keynes on Economics in the 20th Century*, Cheltenham: Edward Elgar, pp. 131-152.

Buyst, E., Maes, I., Pluym, W. and Danneel M., 2005, *The Bank, the franc and the euro. A history of the National Bank of Belgium*, Tiel: Lannoo.

Buyst, E., Maes, I., Plasmeijer, H. W. and Schoorl, E., 2005, Comparing the Developments of Economics during the 20th Century in Belgium and the Netherlands, *History of Political Economy*, Vol. 37, No 1, pp. 61-78.

Caffè F., 1987, Vittorio Marrama e gli anni difficili della ricostruzione postbellica, in G. Gandolfo & F. Marzano (eds.), *Keynesian Theory Planning Models and Quantitative Economics, Essays in Memory of Vittorio Marrama*, Vol. 1, Milano - Dott. A. Giuffrè Editore, pp. 23-29.

Cenzato, G. & Guidotti, S., 1946, *Il Problema Industriale del Mezzogiorno*, Milano: Ministero dell'Industria e Commercio.

Ciocca, P., 2004, Il contributo di via Nazionale, in G. Garofolo & A. Graziani (eds), *La formazione degli economisti in Italia (1950-1975)*, Bologna: Società editrice il Mulino, pp. 579-600.

Coats, A.W. (ed.), 1996, *The Post-1945 Internationalization of Economics*, Durham and London: Duke University Press.

Coddington, A., 1976, Keynesian Economics, the Search for First Principles, *Journal of Economic Literature*, Vol 14, No 7, pp. 1258-73.

de Cecco, M., 1989, Keynes and Italian Economics, in Hall, P. (ed.), *The Political Power of Economic Ideas: Keynesianism across Nations*, Princeton: Princeton University Press.

Drèze, J., 1987, Underemployment equilibria: from theory to econometrics and policy, *European Economic Review* (30): 261-3.

Duchenne, G., 2006, *Esquisses d'une Europe nouvelle*, Ph.D. Thesis, Université catholique de Louvain, mimeo.

Dupriez, L.H., 1947, *Des mouvements économiques généraux*, 2 Vols., Leuven: I.R.E.S.

Eatwell, J. & Panico, C., 1987, Piero Sraffa, J. Eatwell, M. Milgate & P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, London: Macmillan, pp.445-452.

Fauci, R., 2004, Il dopoguerra e la fine dell'isolamento, in G. Garofolo & A. Graziani (eds), *La formazione degli economisti in Italia (1950-1975)*, Bologna: Società editrice il Mulino, pp. 29-62.

Gandolfo G., 1987, The Life and Works of Vittorio Marrama, in G. Gandolfo & F. Marzano (eds.), *Keynesian Theory Planning Models and Quantitative Economics, Essays in Memory of Vittorio Marrama*, Vol. 1, Milano - Dott. A. Giuffrè Editore, pp. XIII-LIV.

- Gigliobianco, A., 2006, *Via Nazionale. Banca d'Italia e classe dirigente. Cento anni di storia*, Roma: Donzelli editore.
- Hall, P. (ed.), 1989, *The Political Power of Economic Ideas: Keynesianism across Nations*, Princeton: Princeton University Press.
- Hayek, F.A., 1928, Das Intertemporale Gleichgewichtssysteme der Preise und die Bewegungen des Geldwertes, *Weltwirtschaftliches Archiv*, Vol. 28, pp. 3-76.
- Hildenbrand, W., 1989, CORE and equilibria of a large economy, in Cornet, B. and Tulkens, H. (eds.) *Contributions to Operations Research and Economics: The Twentieth Anniversary of CORE*, Cambridge: MIT Press.
- Janssens, V., 1994, La Banque Nationale de Belgique, in *Les Banques en Europe de l'Ouest*, Paris: CHEFF, pp. 261-271
- Keynes, J.M., 1919, *The Economic Consequences of the Peace*, London: Macmillan.
- Kirschen, E.S. et al., 1953, *Premiers éléments d'une comptabilité nationale de la Belgique, 1948-1951*, Brussels: Institut de Sociologie Solvay.
- Kirschen, E.S. et al., 1964, *Economic Policy in Our Time*, Amsterdam: North-Holland.
- Klein, L., 1966, *The Keynesian Revolution*, 2nd Edition, London: Macmillan.
- Lamfalussy, A., 1961, *Investment and growth in mature economies: The case of Belgium*, London: Macmillan.
- Löwenthal, P. & Siaens, A., 1972, Léon H. Dupriez, in L.H. Dupriez et al., *Problèmes économiques contemporains. Quarante-cinq années d'expérience*, Leuven: I.R.E.S., pp. 13-27.
- Lunghini, G., 2005, Einaudi e Keynes, in Accademia Nazionale dei Lincei (ed.), *Luigi Einaudi, Istituzioni, Mercato e Riforma Sociale*, Roma: Bardi Editore.
- Maes, I., Buyst, E. & Bouchet, M., 2000, The Post-1945 Development of Economics in Belgium, Coats, A. W. (ed.), *The Development of Economics in Western Europe since 1945*, London, Routledge.
- Maes, I. and Quaglia, L., 2003, The Process of European Monetary Integration: a Comparison of the Belgian and Italian Approaches, *BNL Quarterly Review*, No 227, pp. 229-335.
- Maes, I. & Buyst, E., 2005, Migration and Americanization: the Special Case of Belgian Economics, in *The European Journal of the History of Economic Thought*, Vol. 12, No 1, pp. 73-88.
- Magliulo, A., 2003, Il Keynesianismo in Italia (1931-1963), in P. Barucci (ed.), *Le frontiere dell' economia politica*, Firenze: Edizione Polistampa.
- Modigliani, M., 1999, *Avventure di un Economista*, Roma: Laterza.
- Nédée, F., 1975, Beschouwingen met betrekking tot de economische filosofie van Prof Dr. Gaston Eyskens, in *Liber Amicorum Professor Dr. Gaston Eyskens*, Leuven: Universitaire Pers Leuven.
- Neessens, V., 1957, Regionaal-economische actie in de Verenigde Staten, in *Tijdschrift voor Economie*, Vol. 2, pp. 377-394.
- Parisi, D. & Rotondi, C., 1999, Keynesian Elements in a Long-term Analysis: the Views of Two Influential Pre- and Postwar Italian Economists, L. Pasinetti & B. Schefold (eds.), *The Impact of Keynes on Economics in the 20th Century*, Cheltenham: Edward Elgar, pp. 153-159.
- Pasinetti, L., 1999, J.M. Keynes's 'Revolution' - the Major Event of Twentieth-century Economics?, L. Pasinetti & B. Schefold (eds.), *The Impact of Keynes on Economics in the 20th Century*, Cheltenham: Edward Elgar, pp. 3-15.
- Patinkin, D., 1976, Keynes and Econometrics: On the Interaction Between the Macroeconomic Revolutions of the Interwar Period, *Anticipations of the General Theory*, Oxford: Blackwell, 1982, pp. 223-270.
- Pinxten, K., 1952, Keynes' theorie en haar invloed op het economisch denken en de economische politiek, in *Economica documentatie*, Nr 6, Juni 1952, Leuven: Centerick, pp. 239-272.
- Porta, P. L., 1997, Italian Economics through the Postwar Years, in Coats, A.W. (ed.), *The Post-1945 Internationalization of Economics*, Durham: Duke University Press, pp. 165-183.
- Porta, P. L., 2000, Europe and the post-1945 internationalization of political economy, the case of Italy, in Coats, A.W. (ed.), *The Development of Economics in Western Europe since 1945*, London: Routledge.

- Rey, G., 2004, Gli studi di economia applicata e l'affermazione dell'econometria, in G. Garofolo & A. Graziani (eds), *La formazione degli economisti in Italia (1950-1975)*, Bologna: Società editrice il Mulino, pp. 29-62.
- Ricciardi, F., 2007, Il management del "governo della scarsità": l'IRI e i piani di ricostruzione economica, 1943-1947, mimeo.
- Saraceno, P., 1949, Public Expenditure, Savings and Foreign Loans in the Development of Southern Italy, *BNL Quarterly Review*, Vol. 2, No. 10, July-September.
- Sirjacobs, I., 1997, *L'économiste dans le temps. 100 ans de Sciences économiques à l'U.L.B.*, Brussels: Archives de l'U.L.B.
- Sraffa, P., 1960, *Production of Commodities by Means of Commodities*, Cambridge: C.U.P., 1979, XII + 99 pp.
- SVIMEZ, 2006, La storia della SVIMEZ, [www.svimez.it](http://www.svimez.it), retrieved on 26-10-2006.
- Sylos Labini, P., 1949, The Keynesians (A Letter from America to a Friend), *BNL Quarterly Review*, Vol. 2, No. 11, October-December.
- Tinbergen, J., 1952, *On the Theory of Economic Policy*, Amsterdam: North-Holland.
- Van der Wee, H. & G. Dancet, 1986, De Belgische nationale boekhouding, 1920-1985: geschiedenis van haar berekenings- en reconstructiemethodologie, in V. Van Rompuy (ed.), *Actuele economische problemen. Theorie en politiek*, Leuven: Universitaire Pers Leuven, pp. 145-168.
- Van Poucke, G., 1942, *Openbare werken en conjunctuurpolitiek*, Antwerpen: Standaard Boekhandel.
- Van Waterschoot, J., 1975, Over de trage en gebrekkige doorstroming van wetenschappelijke kennis naar economisch beleid, in *Liber Amicorum Professor Dr. Gaston Eyskens*, Leuven: Universitaire Pers Leuven, pp. 405-414.



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