Silvio Gesell: 'a strange, unduly neglected' monetary theorist

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Abstract:

Given the renewed interest in negative interest rates as method for removing the floor to nominal interest rates, this article offers a concise review of Gesell's life, work and its place in the history of economic thought. It provides a brief biographical sketch of Gesell, demonstrating both his relative prominence as a social reformer during the interwar years as well as his close affiliation with anarchism. The article then gives a concise summary of Gesell's theory of effective demand and interest as expounded in the *Natural Economic Order*, the former being neglected by most scholars working on the subject. Finally, it is demonstrated that Keynes endorsement of Gesell as 'a strange, unduly neglected prophet' is another piece of evidence for rejecting Hick's classic interpretation of the *General Theory*. If one takes Keynes extensive discussion of Gesell's theory of interest as a key for understanding the *General Theory*, Keynes main innovation of General Theory becomes a monetary theory of interest based on uncertainty that results in liquidity preference. The limited literature on Keynes' link to Gesell, published mainly in the 1940s, has however been widely ignored in the debate about the *General Theory*.

Keywords:

History of Economic Thought, Theory of Interest, Negative Interest Rates, John Maynard Keynes, Silvio Gesell

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Introduction

When the financial crisis engulfed the world economy in 2007/2008, central banks around the world were quick to respond by lowering nominal interest rates drastically. However, when the financial turmoil after the bankruptcy of Lehman hit the real economy in 2009, most developed countries were already close to the zero bound to nominal interest rates, at which conventional monetary policy becomes useless in lowering real interest rates and stimulating effective demand. Worse, if deflation persists in such an environment, the real interest rate on money surges in the middle of the recession.[2] Thus, the monetary authorities turned to what was labelled 'unconventional' monetary policy, a combination of 'qualitative and quantitative easing' (Buiter, 2008a), policies with which central banks affect asset prices and financial conditions by balance sheet policy in contrast to conventional interest rate policy. Although it is hard to argue that these policies were ineffective in avoiding a deflationary crisis, they have some potentially serious side-effects such as a distortion of competition as they favour some borrowers over others or the financing of public debt with the ensuing risk of inflation (Borio and Disyatat, 2010, pp. 85-86).

Given this dilemma, some prominent economists have advocated a different solution. For example, Gregory Mankiw (2009), in an article in the New York Times, reflected on the possibility of negative interest rates via a periodic taxation or partial confiscation of base money. Seeing the nominal value of their money balances shrinking over time, money holders would be willing to lend out their money even at negative lending rates if these are still higher than the implied negative return on their money holdings. If the asymmetry in the domain over which the interest rate can be set by the monetary authorities is removed by such a scheme, central banks would in fact be able to combat recession and deflation via conventional monetary policy, avoiding the perils associated with balance sheet operations. Indeed, in an internal study, the Federal Reserve Bank specified the ideal

[2] This can be interpreted as deflationary spiral 'where inflation and expected inflation fall, nominal interest rates at some point come up against the zero bound, real interest rates rise, aggregate demand and expected inflation fall even further, real rates rise by yet more, and so on' (Yates, 2004, p. 427).

interest rate at minus five percent (Guha, 2009) and the Swedish Central bank actually cut its deposit rate to minus 0.25 % at the height of the crisis (Sveriges Riksbank, 2009). Hence, the financial crisis started a monetary policy debate that took place mainly in the blogosphere, in parliamentary or congressional evidence or in speeches (see for further references Buiter, 2009, p. 216). What had been the domain of few monetary economists came to the attention of a wider audience.[3]

Substantial negative rates are today an impossibility because in the current monetary regime there is a limit to the negative rate which can be set, which is given by the zero nominal interest rate on cash (coins and notes) and their storage costs. This floor to rates is called the zero bound to nominal interest rates. It exists because coins and notes are bearer instruments as opposed to registered instruments such as bank accounts (Buiter, 2009, p. 214). Indeed, deducting negative interest from commercial bank reserves or any form of registered account is as trivial as collecting positive interest (Buiter & Panigirtzoglou, 2003, p. 730). However, this cannot be done with coins and bank notes, because these are anonymous bearer bonds and their transfer is not registered. Forcing the anonymous holders of notes[4] to pay the interest due is thus impossible, at least with the current form of money. Hence, any attempt to levy negative interest on registered accounts above the carry and storage costs of notes would cause substitution of the former by the latter, given that they are perfect substitutes in the provision of liquidity. Thus, if one wishes to set negative nominal interest rates, it is necessary to submit the whole monetary base to negative interest rates, including of course notes.

In this context, a handful of authors have taken up the idea of a periodic tax on money as a means of overcoming the zero bound on interest rates, which renders monetary policy useless in fighting deflation and recession, as for example, in Goodfriend (2000), Buiter and Panigirtzoglou

[3] See for further references Buiter (2009, p. 5). A review of monetary policy at the zero bound is given by Ullersma (2002) and Yates (2004).

[4] In the literature, coins are not considered in the analysis since they are only available in small denomination and thus storing large sums of money in coins would incur high storage cost and thus allow for a relatively high negative rate of interest (Goodfriend, 2000, pp. 1015).

(2001; 2003), Fukao (2005) and Buiter (2005a,b; 2007; 2009). In doing so, they trace the origin of the proposal back to Silvio Gesell, a prominent social reformer of the interwar period, whose thoughts inspired a social movement that exists to this day. He was the first to propose negative nominal interest rates by imposing a periodic tax on money, which was to be collected via stamps that were to be purchased from the monetary authorities and had to be affixed to bank notes if they were to remain legal tender.[5] Today, there are technically more elaborate ways of imposing this tax on notes (Goodfriend, pp. 1016-1017) and a periodic tax is not the only feasible alternative.[6] Nevertheless, only if the zero bound is removed, central banks will be able to set negative interest rates to revive borrowing and to stimulate demand via interest rate policy in times of recession and deflation.

Neither the problem nor the proposed solution is new at all. During the Great Depression, two of the most prominent economist of the period, Irving Fisher and John Maynard, were also concerned about the effectiveness of monetary policy in a deflationary crisis. Fisher (1933a) for his part noted that debt-deflation leads to a fall in nominal interest rates while at least the real interest rate on money holdings rises, a fact that leads to hoarding and slowing down of the velocity of circulation of money, which in turn further depresses prices and economic activity. In this context, Fisher (1933b) advocated the introduction of stamp scrip, money whose nominal value would shrink over time. This would reduce the real interest rate on money and increase its velocity of circulation, thereby reflating the economy (Pavanelli, 2004, pp. 293-295). However, while Fisher remained critical of Gesell's theory,[7] Keynes took the opposite stand. He thought stamp scrip to be 'not feasible' in the way Gesell proposed it, but insisted that 'the idea behind stamped money is sound' (Keynes, 1936, p. 357). In fact, Keynes (1936. pp. 353-358) devoted five entire pages to the theory of Gesell whom he

[5] Gesell (1958, pp. 266-276) proposed that a stamp worth a thousandth of the note's face value had to be attached to it once a week, amounting to an annual depreciation rate of approximately 5 %.

[6] Buiter (2007; 2009b) has even proposed two more rather simple ways for removing the zero bound: decoupling the numeráire and payment function of currency and abolishing coins and notes completely.

[7] Fisher stated that 'there is much in Gesell's philosophy to which, as an economist, I cannot subscribe, **especially his theory of interest**; but Stamp Scrip, I believe, can, in the present emergency, be made at least as useful an invention as Manuel Garcia's [a singer] laryngoscope' (Fisher, 1933, pp. 17 [my emphasis]). This is not surprising since Fisher anchored his theory of interest on time preference (Fisher, 1930).

characterised as a 'strange, unduly neglected prophet whose work contains flashes of deep insight and who only failed to reach down to the essence of the matter ' (Keynes, 1936, p. 353).

Given that today's proponents of negative interest rates have little to say about Gesell's merits as theorist, one wonders why Keynes extensively praised this German autodidactic economist for his theoretical insights.[8] It seems rather unlikely that this was just another detour[9] as some might claim. Indeed, Keynes closes his chapter *Notes on Mercantilism* by stating yet again that Gesell belongs to 'the brave army of heretics, who, following their intuitions, have preferred to see the truth obscurely and imperfectly rather than to maintain error, […]' (Keynes, 1936, p. 371). Even more, Gesell is the only theorist explicitly mentioned in the conclusion – hardly a supplementary chapter – of the *General Theory* and yet again Keynes (1936, p. 379) agrees with him on ultimate end of state intervention: the creation of an economy in which the free forces of production can be employed at maximum output.[10] Given the extended and positive nature of these remarks, it is unlikely that they came out of the clear blue sky.[11] Indeed, it is far more likely that Keynes used the repeated references to Gesell – and other monetary heretics such as Malthus – to highlight the parts of his analysis where he differed from what he called 'classical economics'.[12] This is supported by the fact that Keynes (1936, p. 353) claimed that the significance of Gesell's intuitions become only evident to him once he had reached his own conclusions in his own way. Therefore, although not impossible, it seems unlikely that Gesell had a direct influence on Keynes thinking. Rather – I believe – Keynes referred to Gesell in order to highlight the new ideas he advanced. Indeed, if one reads the *Preface* of

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[8] Keynes (1936) refers to Gesell on pages p. 32, pp. 353-358, p. 371, p. 379. In general, these remarks are very positive in tone, e. g. he judged Gesell's dialogue between Robinson Crusoe and a stranger in which Gesell expounds the logic of his argument to be 'a most excellent economic parable – as good as anything of the kind that has been written' (Keynes, 1936, p. 356). Keynes (1936, p. 355) also maintained that *The Natural Economic Order* was written in a 'cool, scientific language', but also with 'emotional devotion to social justice' and a 'moral quality' that is visible in the preface of Gesell's main work. See Darity (1995, pp. 34-39) for Gesell's moral qualities in the eyes of Keynes.

[9] Hansen (1953, p. 155; 159) famously stated that chapter 17 *The Essential Properties of Interest And Money* of the General Theory is 'simply a detour' and 'that not much would have been lost had it not been written'. Given that the books is called The *General Theory of Employment, **Interest And Money*** [my emphasis], such an interpretation seems rather odd.

[10] See Keynes (1936, p. 379) and the discussion below.

[11] As George Garvy (1975, p. 392) put it: 'One wonders why Keynes devoted five pages to the life and theories of a typical monetary crank, whose name has in the meantime lapsed into oblivion, […].'

[12] I am indebted to an anonymous referee for suggesting this interpretation.

the *General Theory*, it seems that Keynes was rather not concerned about the consistency or truthfulness of his new ideas which he thought to be 'extremely simple and obvious', but rather whether it would be possible to escape from the old ones (Keynes, 1936, p. viii). Hence, studying Gesell's theory and Keynes embracing comments on them allows us to better distinguish the novel parts of Keynes analysis.

Historical Background

Gesell not only pioneered taxing money schemes, he also developed a program of social reform which included an economic theory, a monetary policy scheme, and was firmly based on a social utopia. He and his work were also comparatively well-known before World War Two, as is shown by Dillard's (1942a, p. 348) list of works referring to Gesell and by his appearance in the *Encyclopaedia of the Social Sciences* (Garvy, 1975, p. 392). In addition, experiments with stamp scrip were conducted in Germany and Austria during the Great Depression. Besides Erfurt and Schwanenkirchen, the Austrian town of Wörgl became a frequently-cited proof of the effectiveness of Gesell's proposal (see Muralt, 1989, and Senft, 1990, pp. 199-212). In the United States some rural communities, e.g. Howarden, Iowa, put limited amount of stamp scrip into circulation in order to pay for public works,[13] with even more contemplating such a move. Hans R. L. Cohrssen, Fisher's assistant and a committed free-economist, counted approximately 450 U.S. municipalities that wanted to issue stamp script. Moreover, in 1932 there was a short-lived legislative initiative (Bankhead-Pettengill Bill) which asked for the creation of one billion Dollars of stamp script in order to finance labour intensive public works. For the same reason, the state of Oregon planned to issue 80 million Dollars in stamp script in 1933, but the plan was stopped by the Treasury, who was willing to accept stamp script on a local level, but did not endorse general monetary reform (Cohrssen,

[13] In the United States, most of the stamp scrip had the notes stamped per transaction, not per period, which contrary and to Gesell's and Fisher's intentions amounted to an additional sales tax and were thus not long lived (Gatch, 2006, pp. 27-29).

1991, p. 5; see also Gatch, 2006, p. 19). At the height of his influence, Gesell was even appointed as Minister of Finance in the first Bavarian Soviet Republic in 1919. Moreover, to this day Gesell's ideas have attracted a small, but convinced group of followers: the *Freiwirtschaftsbewegun*g (free-economy movement).[14] In the following Gesell's biography and place in the history of economic thought is discussed extensively because it is essential for understanding the aim of his proposed monetary reform (Dillard 1942a, p. 352).

Silvio Gesell[15] was born as the seventh of nine children in St. Vith, district of Malmedy[16], on the 17th of March 1862. His father was a protestant Prussian civil servant, his mother a catholic Walloon teacher. He was educated at the local secondary school and attended grammar school in Malmedy, which he was forced to leave before graduation, as his parents were unable to afford his further attendance. Gesell then joined the *Reichspost* (Imperial Post), but left the civil service soon after to join his brother's commercial company in Berlin in 1878. Four years later, he went to Malaga as a commercial correspondent until 1884, when he was forced to return to Germany for his military service. In 1887, he emigrated to Buenos Aires, where he opened a business for dental equipment, called the 'Casa Gesell'. Instigated by the ongoing economic and social crisis in Argentina (Dillard, [1940] 1997, pp. 121-14; see also Werner, 1990, p. 8; Senft, 2006, pp. 68-69), Gesell begun his autodidactic reflections on the monetary system. In his debut treatise, *Die Reformation im Münzwesen als Brücke zum Sozialen Staat*, he presents his main concept of negative interest rates on ready money via the stamping system, which he later named *Freigeld* (free money), for the first time (Onken, 1999, p. 8). After his return to Europe in 1899, Gesell went on to live in Switzerland, where he took up farming and intensified his autodidactic studies. The idea of *Freiland* (free land) was

[14] 'Free' refers to Gesell's claim that depreciative money will set the stage for a truly free economy by eliminating monetary interest which constitutes unearned income and hampers capital growth. See the discussion below. Today, the free economy movement is most visible in the various regional currency initiatives in Germany (Gelleri 2008), which are nearly all designed as depreciative currencies, and are intended to realise regional, environmental and socio-political ends (Rösl, 2006, pp. 6-8). Rösl (2008) offers a short critical assessment of existing regional and local currencies.

[15] See Onken (1999) and Wolf (1995) for an extensive overview of Gesell's life and work.

[16] Malmedy and Eupen were two Prussian/German districts that were annexed by Belgium after the First World War. Its population makes up Belgium's German minority.

added to his repertoire during this period in 1904 (Bartsch, 1994, p. 324).[17] He went to live again in Argentina between 1906 and 1911, before returning to Europe, where he published *The Natural Economic Order*, his main work (Onken, 1990, p. 19), in 1916.

After World War One on April 7th 1919, Gesell became a *Volksbeauftragter* (people's commissioner) for finances in the first libertarian Bavarian Soviet Republic. Gesell remained in office for only a week as the libertarian government was quickly replaced by a communist regime after an attempted coup by troops loyal to the republican government in Bamberg on the 13th of April.[18] The new communist leadership dismissed Gesell on the 14th of April, shortly after he had finished his program, which included a land reform, the introduction of stamped money, and an annuity to all women with children (Engert, 1986, pp. 29-31). His announcement of a monetary reform led to bank runs, and caused a massive loss of confidence in the government (Karl, 2008, p. 184). Following the defeat of the communist administration at the hands of the federal government in Berlin, Gesell was arrested on the 2nd of May, and tried for high treason but acquitted after only one day of trial on July, 9th.[19] During his imprisonment Gesell prepared a plea that was never held but transported his messianic sense of purpose (Gesell, 1920a, p. 39). However, his actual defence was somewhat more earthly, insisting that he had no part in the decisions of the Soviet and was merely trying to prepare a program of financial reconstruction (Gesell, 1920b, p. 42). Indeed, Gesell offered his services to the parliamentary government in Bamberg shortly on April 13th, showing little loyalty to the Soviet Republic. Furthermore, civil servants working in the ministry of finance testified that Gesell had not interfered with the daily business at all (Karl, 2008, p. 184).[20] This claim seems plausible since

[17] The later added 'Freiland' idea postulated a landowners' monopoly on land. Since land is not reproducible, its owners will receive an unjustified rent, because the law of competition does not apply. Hence currency reform will affect the scarcity of land and may still cause monopoly rents or interest (see the discussion below). Therefore, a free society must forbid the ownership of land. Given that Gesell proposal for land reform has received little attention (see for example Keynes, 1936, p. 355), I will not elaborate on it further. For a short overview of the proposals for free-land, see Wirth (2003, pp. 111-128). See also Lorber (2009).

[18] See, for an overview of the revolution including further references, Grau (2009).

[19] Gesell was the only member of the Soviet that was not found guilty (Karl, 2008, p. 185).

[20] Such a testimony cannot be found in the report of the trial which was published in 1920 together with Gesell' plea in *'Die Freiwirtschaft vor Gericht'*. However, according to Engert (1986, p. 64), who was present during the trial, the protocol was

Gesell's two associates who helped him in preparing his program were not employed by the Ministry of Finance, but by him privately (Gesell, 1920b, p. 43). After his short intermezzo in politics, Gesell spent the last decade of his life promoting his ideas to different social and political groups,[21] dying on the 11th of March 1930.

Concerning Gesell's place in the history of economic thought, it is rather difficult to classify him, because, later in life, Gesell developed a rather colourful social utopia around the core of his economic theory. His ideal of an *akratic* society combined Darwinian elements with the philosophies of Nietzsche and Stirner. In his utopia *Der abgebaute Staat*, Gesell (1927) for example advocated free female mating, which was to be supported by an annuity to all women in order to strengthen female emotional independence.[22] This somewhat unorthodox weltanschauung renders it difficult to position Gesell within one of the contemporary ideological currents (Flik, 2004, p. 124) and having offspring from three extramarital affairs, besides his legitimate children, and being openly critical of the dishonesty of Christian society, did not enhance his reputation in academic circles either (Flik, 2004, p. 125; Senft, 1990, p. 36). It is this combination of autodidactic scholarship and mingling economic theory with libertarian social utopia that made his reputation as a 'typical monetary crank' (Garvy, 1975, p. 392). Huber (1998, p. 383) has therefore called him a 'political guru with a sizeable and colourful discipleship'.

Thus, the difficulties in positioning Gesell's economic theory within one school of thought arise from the blend of socio-political ideals with economic theory, and from the combination of socialist with libertarian[23] ideas. Nevertheless, his economic thought was embedded in set of socialist

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done by two female sympathizers of Gesell who volunteered for the task as the court had failed to ask for a professional stenographer. Therefore Engert notes that the records of the proceedings offer only an inconsistent account.

[21] Gesell was a very prolific writer, his collected works consisting of 18 volumes.

[22] This was meant to allow women to choose the potential fathers of their children according to their fitness (in Darwinist sense) and not out of economic or social necessity, e. g. marriage. For an overview, see Bartsch (1989, pp. 24-31). An explanation of the social utopia is proposed by Senft (2006, p. 79), who argues that Gesell incorporated much of contemporary zeitgeist into his economic theory in order to enhance its public reception.

[23] For an introduction into libertarian ideas see Vallentyne (2009).

libertarian[24] convictions that deeply influenced his economic reasoning.[25] For example, Gesell argued the normative condemnation of interest as unearned income was common to all kinds of socialism (Gesell, 1958, p. 27). However, Gesell rejected the Marxist solution of collective property and centralized state economy, which he saw as amounting to the 'abominable rule of officials, the death of personal freedom, personal responsibility and independence' (Gesell, 1958, p. 15).

While sharing what he perceived to be goals of socialism, he opposed its means as it stands against his normative ideal of individual freedom (Onken, 1990, p. 14). Instead, by monetary and land reform, he aimed to 'create the conditions necessary for a truly free paly of economic forces' (Gesell, 1958, p. 15). This concept is called 'The Natural Economic Order' (NEO), [26] which, given the nature of man, is founded on self-interest (Gesell, 1958, p. 10). Hence, the distribution of wealth in such a system is apportioned by competition, but all sources of income other than labour are eliminated (Gesell, 1958, p. 38). Therefore the NEO might also be referred to as the 'Manchester System', […] (Gesell, 1958, p. 12).

In short, Gesell proposed a libertarian way of achieving socialist goals, positioning himself explicitly in the tradition of the anarchist[27] Proudhon.[28] Darity (1995, p. 34) argued that Gesell was not 'anarcho-libertarian' because the state and the monetary authorities in particular played an important part in his scheme (see below). Indeed, there is little doubt the Gesell of *The Natural Economic Order* is not an anarchist in a strict sense. However, anarchism does not preclude all form

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[24] 'Libertarian socialism' or 'left libertarianism' (Sullivan, 2003, p. 612) combines the conventional liberalism of the right with egalitarianism of the left. They distinguish sharply between talents, which are at the complete disposal of an individual, and external resources, of which each individual is just entitled to a just fair share (Fried, 2004, pp. 67-68,; see also Vallentyne et al., 2005).

[25] For the notion of justice in Gesell's work see Senft (2006).

[26] In the following, I will refer to the concept of 'The Natural Economic Order' as NEO, while *The Natural Economic Order* is used for the book.

[27] There is now single definition of anarchy (De George, 2005, p. 31). Generally speaking, anarchism 'combines idea and values from both liberalism and socialism and me be considered a creative synthesis of the two great currents of thought' (Marshall, 2010, p. 639).

[28] See for Proudhon's concept of 'mutualism', a middle way between the principles of property and communism that would reward only labour as a source of income Miller (1987, pp. 11-12). Gesell repeatedly referred to Proudhon (Senft, 1990, pp. 71-76). However, he maintained that he developed his theory without reading Proudhon(Gesell, 1958, p. 31).

of social organisation (De George, 2010, p. 32), even if this is a common believe[29] and the free economy movement consisted of various different currents before World War Two– an anarchistic, a liberal, and a racial school – and Gesell sided with the anarchists, the 'Physiokratischen Kampfbund', their program being written by Gesell himself (Bartsch, 1989, p. 17-31). Moreover, in the foreword his last work of 1927, which is dedicated to two anarchists, he claimed to have found a solution to what he called the 'monetary problem' which allowed him to discard of the state completely (Bartsch, 1989, p. 24).

Another link to the anarchist school of thought is given by Gesell's repeated reference to Max Stirner (Senft, 1990, p. 39), who is regarded as the founder of the individualist school of anarchism (Miller, 1987, p. 11), and to Gustav Landauer, one of the most influential German anarchists of the early 20th century (Woodcock, 1962, p. 431), to whom Gesell referred to in the preface of the *Natural Economic Order* (Gesell, 1958, p. 23). In addition, there was also a considerable degree of practical cooperation between Gesell and the anarchist movement. In 1911, Gustav Landauer (1989) acclaimed Gesell for his recognition and advancement of Proudhon's theories and it was he who offered Gesell the ministry of finance in the Bavarian Soviet Republic a few years later (Blanc, 2002, p. 6).[30] After being ousted from the government, Landauer and Gesell planed the formation of an anarchist union called the *Sozialistischer Freiheitsbund*, explicitly directed against both state-run communism and traditional capitalism. Since Landauer was killed shortly afterwards by right-wing *Freikorps* at the end of the Bavarian Soviet Republic, the attempt to institutionalise the union of German anarchism with the free-economy movement was never achieved (Bartsch, 1986).

Therefore, it might be most appropriate to view Gesell as growing ever closer to anarchist thought in the course of his life, especially during the interwar period. Thus, I agree with Bartsch

[29] See for example Marshall (2010, pp. -640): '[Anarchism] is opposed to the State, believing that freedom cannot be achieved through the State, but only from the State'.

[30] The first Bavarian Soviet Republic in Munich of the 7th of April was dominated by left wing libertarians (Seligmann, 1989, p. 49; see also Karl, 2008). Two of three of Germany's outstanding anarchist's intellectuals, Erich Mühsam and Gustav Landauer, occupied important posts within the soviet government (Woodcock, 1962, p. 431).

(1989, pp. 17), who stated that Gesell is best described as an anarchist, albeit with considerable idiosyncratic qualities.[31] However, with respect to *The Natural Economic Order*, given the above described inconsistencies in his writings and to avoid confusion, his proposal for socio-economic reform is best described as libertarian socialism that aims at ending capitalist exploitation.

Gesell's Theory of Effective Demand and Interest

In what follows, I will present Gesell's theory of monetary or effective demand and interest as well its presumed effects on the real economy. While (neo) classical theory argues that money is only an useful invention which facilitates trade (Davidson, 2007, pp. 27-28), Gesell believed that money was the source of interest contrary to classical notion of interest as being determined by productivity and thrift (Snowdon & Vane, 2005, pp. 47-49). This interest sets a limit to the growth of the capital stock beyond its full potential. In doing so, I will rely on the existing, but limited literature on Gesell,[32] but I will also quote extensively from the original sources.

In addition, I hope to demonstrate in detail that Gesell advanced a theory of monetary demand based on the Quantity Theory of Money, which he rejected in its 'crude' form (Gesell, 1958, p. 260), an aspect which so far has rarely been mentioned by authors working on Gesell. For example, Dillard ([1940] 1997, p. 171) stated that Gesell 'offers no separate theory of crisis' because he explains disequilibria through the nature of interest. Although Gesell indeed links his theory of effective demand to his theory of interest, this is not entirely true. As Dillard ([1940] 1997, pp. 309-310) noted, Gesell initially seems to have been concerned with financial crisis and hoarding, not the rate of interest as such, which appeared only later in his works. Therefore one should also to look at his theory of effective demand, if one aims to understand the origins of his stamping system.

[31] See also Schmitt (1989, p. 44), who called Gesell's theory the preliminary conclusion of independent anarchist economic theory and Preparata (2002, p. 218), who called him an 'anarchist prince'.

[32] Research on Gesell was conducted at first almost exclusively by Dillard during the 1940s (Dillard, 1942a,b; Dillard, 1946; Dillard, 1948; Dillard, [1940] 1997) and is still the most comprehensive academic treatment of Gesell. Others author include Herland (1977; 1992), Darity (1995), Blanc (1998; 2002), Clerc (2002), Preparata (2002), and Preparata and Elliot (2004).

Gesell's starting point is that money can be stored with negligible carrying charges. Commodities or wares on the other hand must be offered immediately as they are subject to carrying cost due to natural decay. This advantage of money holders holds serious implications for the validity of Say's Law and thus economic stability. For Gesell aggregate supply of goods must equal demand for money and aggregate demand must necessarily equal the supply of money (Gesell, 1958, pp. 215-217) because he distinguishes between the human needs and the monetary demand for commodities. In the society with a division of labour, human needs only become 'effective' demand if they are endowed with money.[33] He then (Gesell, 1958, pp. 259-260) argues that the supply of goods is always equal to the available stock and hence aggregate supply is pre-determined by production,[34] but for aggregate demand that relationship does not hold true. Although the stock of money fixes the upper limit of its supply, it sets no lower limit because money holders may withdraw cash without costs. Consequently, aggregate monetary 'demand is the product of the quantity and velocity of circulation; […]' (Gesell, 1958, p. 236).[35]

Given the zero storage costs of money, in Gesell's framework, the velocity of circulation depends on the strategic behaviour of the money holders, who only lend out if they receive a profit. This depends on selling their goods above the initial purchase price (Gesell, 1958, p. 230). Consequently, while aggregate supply is determined by the stock of goods, aggregate demand is subject to the profit-seeking strategic behaviour of the money holders and may be insufficient because money holders refrain from purchase if they expect falling prices. Hence, the velocity of circulation is determined endogenously and may fluctuate. Gesell thus rejects Say's law that each supply creates

[33] 'The "needy" need or desire commodities, but only those persons demand commodities who offer money for them. […]In short, the demand for wares consists of the offer of money, those who have money must create a demand' (Gesell, 1958, p. 207).

[34] According to Gesell (1958, pp. 209-215), the stock of wares depends on the amount of goods being brought to the market and the amount of goods leaving the market after being consumed. Gesell assumes that this stream is continually increasing due to population growth, increasing division of labor, technological progress, and new products.

[35] This is equal to Hawtrey's and Keynes' use of the term as 'aggregate nominal expenditure in the economy' (Laidler, 1999, p. 116; pp. 250-251). Gesell (1958, p. 241) states that also personal credit is a component of demand. However, he argues that the availability of credit behaves similarly to the velocity of money. In a boom, when there is confidence, there is credit, in depression, there is no confidence and hence no credit (Gesell, 1958, pp. 233-234).

its own demand (see also Dillard, [1940] 1997, p. 161). Based on these insights, Gesell explained the occurrence of economic crises. Monetary or effective demand as determined by money supply is only available in the absence of deflation and deflationary expectations.[36]

'The explanation of the causes of commercial crises indicates the condition which must be fulfilled to prevent their occurrence. The condition is that prices must never, under any circumstances, fall' (Gesell, 1958, p. 243).

However, as long as the money holders are able to store money without carrying costs, an increase in the amount of money alone is not able to boost monetary demand. In Gesell's words:

'But, if as experiences teaches, the supply of money does not exactly and at all times correspond to the stock of money, then the price of money [price level] is independent of the stock, and the crude quantity theory cannot be applied to money' (Gesell, 1958, p. 260).

For Gesell, the price level is simply determined by the ratio of effective demand to (constant) supply (Gesell, 1958, p. 236) and is independent of the amount of money as long money can be hoarded. In this case it is the velocity of circulation that determines effective demand, which depends on the expectations of money holders. If these are depressed, this may lead to a cumulative process of deflation because once aggregate demand becomes insufficient, this will further depress prices. In this context, Gesell also noted that a fall in price level will make it difficult to service contractual liabilities, which will restrict personal credit and increase the need for money even more (Gesell, 1958, p. 234), which in turn further reduces demand:

'This therefore, is the law of demand, that it disappears when it becomes insufficient' (Gesell, 1958, p. 235 [bold type in the original]).[37]

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[36] When confidence exists, there is money in the market; when confidence is wanting, money withdraws – such is the teaching of experience' (Gesell, 1958, p. 260). In this context, Gesell (1958, p. 234) refutes the popular believe that a fall of prices stimulates aggregate demand because people know 'what is offered cheap to-day will be offered still cheaper tomorrow', and thus refrain from purchase.

Gesell's cure for economic crises is therefore to subject money to natural decay via stamping. If money cannot be hoarded, demand will always equal supply and Say's Law as well as the Quantity Theory will hold. For Gesell, money must be 'an instrument of exchange and nothing else' (Gesell, 1958, p. 266) in order to be truly neutral. With depreciative fiat currency those possessing it are no longer able to hoard, which in turn would increase the velocity of circulation to its technologically determined maximum level (Gesell, 1958, p. 220). This enables the authorities to ensure price stability[38] and hence control effective demand by steering the amount of money in circulation by means of an independent monetary policy (Gesell, 1958, pp. 276-285), effectively closing the gap in effective demand:

'In all conceivable circumstance, [...], demand will then exactly equal: 1. The quantity of money circulated and controlled by the state. Multiplied by: 2. The maximum velocity of circulation possible with the existing commercial organisation' (Gesell, 1958, p. 283).

This, in short, is the essence of Gesell's theory of effective demand, which so far has received little attention by scholars. This is due to the fact that it was his theory of interest that received most praise by Keynes and will therefore be summarised in the following. Starting from the same argument about the difference in carrying costs, Gesell argues that money holders cannot only delay purchase, but are able to force owners of real goods to pay a fee for parting with money (Gesell, 1958, p. 228). Hence, wares are sold for their productions costs plus basic interest, the basic interest being channelled from the consumer via the producers/merchants to the possessor of money, as they have to include the costs of borrowed capital in their retail price (Gesell, 1958, pp. 387-388).

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[37] Here it seems that Gesell's argument is very similar to Fisher's (1933a) debt-deflation theory.

[38] Gesell (1958, pp. 191-192) argues that monetary policy should aim at price stability not only because it facilitates exchange which nearly always includes a temporal dimension, but it also saves debtors and creditors alike from unforeseen changes to their assets and liabilities.

Note that for Gesell the exploiting capitalist is the owner of money, not the owner of the means of production as in Marxism, as exploitation takes place during exchange.[39]

Therefore, Gesell postulates the existence of an '*Urzins'*, a basic rate of interest on money, which is due to money's negligible carrying costs. He considers the basic rate of interest to be empirically between four and five percent. It is the concept of the basic rate of interest as a purely monetary phenomenon, which is unique to Gesell's theory (Dillard, [1940] 1997, p. 165).[40] In fact, Gesell (1958, p. 405) refutes the notion that interest is the necessary reward for saving, stating that 'saving is practised throughout nature without the incentive of interest'. Consequently, Gesell (1958, p. 406) explicitly attacks Boehm-Bawerk's, whom he refers to as the 'foremost authority on interest', assumption of a positive time-preference rate as being rather illogical and he also explicitly refutes the notion of interest as being determined by real economic factors (Gesell, 1958, p. 438).

The question then is why are interest rates not considerably higher than the four to five percent to which Gesell refers? Given the above argument, producers of goods should be willing to pay any rate of interest up to the rate of natural decay of their product. However, according to Gesell, there is one rather simple restriction: effective demand for urgent physical needs such as food, clothing etc. cannot be reduced to zero. Therefore money needs to circulate in the economy, at least sufficiently to ensure physical survival (Gesell, 1958, p. 375). In addition, Gesell recognises further factors that limit the rate of interest: primitive production, barter and bills of exchange. An increase in the rate of interest automatically reduces the benefits of the division of labour and increases primitive production. It also leads to an increase in barter and an increased circulation of bills of

[39] 'Wares collect basic interest from the consumer, not for the producer but for the possessor of money (medium of exchange), […]'(Gesell, 1958, p. 388). Gesell quiet often refers to the merchant as the true capitalist, which Dillard ([1949] 1997, pp. 163- 164) explains with the economic situation in Argentina at the time. However, if the merchant relies on borrowed money, he has to hand over interest to his creditor (Gesell, 1958, p. 375). Therefore Gesell's theory is not a theory of the 'tradesman' as Clerc (2002) claims, but rather one of the money lender.

[40] It must be noted, however, that Gesell acknowledged that contractual interest rates contain risk and inflation premiums (Gesell, 1958, pp. 431-436), but he maintained that these would only be slightly above zero. Risk premium, understood as the marginal costs of lending, will be low, because most savers will invest their money in life insurance, which, in turn, will invest in real assets that act as securities (Gesell, 1958, pp. 407-408). The inflation premium will eventually be reduced to zero, because under Gesell's scheme, price stability will be ensured (Gesell, 1958, pp. 278-285).

exchange (Gesell, 1958, pp. 376-380). With rising interest rates, the benefits of conducting transactions with money decrease, and the demand for money will gradually decline to zero. There is, therefore, a prohibitive rate of interest at which producers of goods no longer demand money and at which transactions are either suspended altogether or conducted only by barter. Empirically, Gesell gathered from what he called 'thousands years of experience' that basic interest amounts to 5 % per annum (Gesell, 1958, pp. 374-375), but he fails to provide convincing evidence for this claim (Clerc, 2002, p. 95).

Besides constituting unjust unearned income, in Gesell's framework the existence of money interest also exerts a considerable influence on the capital endowment of the real economy. In his analysis he distinguished between the monetary rate of interest and the marginal productivity of capital (see also Dillard, [1940] 1997, pp. 165-169). Concerning the latter, Gesell argued in line with his above argued about the determination of the general price level that

'Interest on real capital is determined by demand and supply; it is subject to the laws of competition and can be eliminated by a simple change in the ratio of demand to supply' (Gesell, 1958, p. 417).

Consequently, he postulated that excess demand for real capital such as machinery and equipment is the reason why it has a positive marginal productivity and thus yields interest.

'The ratio of houses to tenants, of ships to freights, of workmen to factories is regularly, artificially and inevitably so constituted by the present form of money that demand (tenants and workers) is always faced with an insufficient supply' (Gesell 1958, pp. 390-391).

Under the assumption of a perfect capital market, any investment in real capital must yield at least the same rate of interest as money. Gesell stated that

'Basic interest is the point of equilibrium about which interest on all forms of real capital oscillates' (Gesell, 1958, p. 394).[41]

Thus, only those investments are carried out that yield basic interest, hence the monetary rate of interest sets a lower limit to real capital productivity. Real capital stock increases until its marginal productivity equals basic interest. Any further increase in real capital will cause a downward deviation of marginal productivity from the basic rate of interest, causing disinvestment. The monetary rate of interest is hence the reason why the supply of real capital always falls short of demand:

'Money takes jealous care that its creatures shall not degenerate; it is given only for the construction of as many houses as can be built without causing the yield of interest to fall below basic interest' (Gesell, 1958, pp. 390-391).

Consequently Gesell denied the existence of real capital:

'So-called real capital is therefore anything rather [other] than 'real'. Money alone is true real capital, basic capital. All other capital objects are completely dependent upon the characteristics of the existing form of money; they are its creatures; [....]' (Gesell, 1958, p. 391).

In this framework, capital accumulation leads to crisis because if the capital stock, including the amount of commodities, rises, their prices begin to fall, lowering marginal capital productivity, while deflation raises the real interest earned on money. This leads to a crisis in the manner depicted above with further disinvestment until capital's marginal productivity equals once again basic interest. Hence, his theory of effective demand and interest are connected to each other. However, that Gesell offers a distinct theory of crisis is visible in the fact that besides the reduction in the

[41] Gesell does not distinguish between real capital and commodities. According to Gesell, commodities have to yield interest as well as real capital. '[…] wares must necessarily always find the market conditions which permit them to appear as interest-exacting capital - at least to the consumer, since he pays the price which the producer receives, plus interest' (Gesell, 1958, p. 388).

marginal productivity of real capital, he argues that a crisis is triggered every time the price level falls, for example if the amount of money becomes too small in comparison to aggregate supply, either because the stock of money shrinks or the aggregate supply outgrows the amount of money (Gesell, 1959, p. 242). For Gesell, 'any of the tree causes of falling prices is sufficient alone to produce a crisis; […]' (Gesell, 1958, 243).

Given the above depicted analysis, Gesell assumed that his stamped money would stabilize effective demand, avert crisis and end exploitation by those possessing money. In addition, it would also have a positive effect on the real capital endowment of the economy. Its stock would increase, because the prohibitive rate of marginal productivity, formerly determined by basic interest, would fall to zero.[42] [43] In sum, Gesell did not only offer a monetary theory of interest, but also a very elaborate theory of effective demand – or lack of it – and his stamping system was designed to tackle both problems, while serving his socialist goals of ending capitalist exploitation:

'More than that [stamped money] is not needed to protect the exchange of goods against any conceivable disturbance, to render crises and unemployment impossible, to reduce commercial profits to the rank of a wage, and in a short space of time to drown capital-interest in a sea of capital' (Gesell, 1958, p. 272).

The implication of Keynes appraisal of Gesell

As soon as the Keynes published his *General Theory*, controversy erupted, not only about the merits of his thinking, but also on what it actually meant.[44] This Keynes vs. Classics debate ended in

[42] This constitutes the 'unleashing' (Suhr, 1983, p. 46) of productive forces of society that his followers claim would result from Gesell's scheme.
[43] Nevertheless, the introduction of depreciative money will not eliminate interest all of a sudden. As long as there is excess demand for capital, interest will be paid. However, with the monetary rate of interest reduced to zero, the capital stock will expand and demand for it will equal supply and the scarcity premium will vanish. This process will take time and thus free money will only gradually eliminate the scarcity of real capital (Gesell, 1958, p. 415; see also Dillard ([1940] 1997, pp. 170-171).
[44] See for example the various mathematical interpretations discussed in Darity & Young (1995).

the mid-1950s with the neoclassical synthesis, where (neo) classical microeconomics and Keynesian macroeconomics could co-exist. Macroeconomics became in fact dominated by Hick's IS-LM model in what has become known as 'orthodox' Keynesianism (Snowdon & Vane, 2005, pp. 101-102).[45] While its dominance in economics was broken by the new classical economics of the 1970s, it has remained an important part of most economic textbook. The model's success is astonishing, given its inadequate representation of chapters 3, 16 and 17 of the General Theory, the latter containing important aspects of Keynes interest rate theory, and Keynes's personal criticism of the model (Darity & Young 1995, pp. 12-14).[46] One possible explanation might be that, rather than being an exclusive interpretation of the *General Theory*, the model incorporated many key features of the body of economic thought of the interwar years in a consistent, albeit simple model (Laidler, 1999, pp. 23-24).

Given this inconsistency between the *General Theory* and its dominant interpretation, the criticism by some of Keynes's colleagues concerning the 'bastardisation'[47] of Keynes' insight during the 1940s and 1950s therefore becomes understandable. Those economists that rejected neoclassical synthesis and recognized the importance of liquidity preferences and effective demand have been called Post Keynesians (Davidson, 2005, p. 453). Although a very heterogeneous group, they share the idea that Keynes rejected, amongst others, one of the hallmarks of classical economics: the neutral money axiom (Davidson, 2007, p. 28-30).[48] Davidson (2000, p. 7) argues that that the essential properties of money and savers want for it are ultimately responsible for a lack of effective demand. Indeed, it was Keynes' notion of the principle of effective demand and his

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[45] Minsky (1975) argues that the reason that Hick's interpretation became accepted as the conventional wisdom was due to the fact that (1) Hicks (1937) offered a formalized and simplified model while Keynes (1937a) is his response to Viner used a rather complicated informal model which included uncertainty and (2) that Keynes fell ill at the beginning of 1937 and did not fully recover before the war, in which he served as a government advisor, dying shortly afterwards. Therefore, the so-called Keynesians failed to grasp the concept of liquidity and monetary contracts.

[46] Advocates of the orthodox school assumed the contradictions away by declaring them simple 'detours' or reducing their complexity (Darity & Young, 1995, p. 6).

[47] The term 'bastard Keynesian' was coined by Joan Robinson (1965, pp. 100-101).

[48] According to Davidson (2007, pp. 30-35) Keynes rejected two further axioms: (i) the gross substitution axiom, and (ii) the ergodic axiom (see also Fazzari, 2009, for a concise introduction into the Post Keynesian school).

rejection of classical interest rate theory – developed in the above mentioned chapters of the *General Theory* – that marked his departure from classical thought (Snowdon & Vane, 2005, p. 58; p. 62).[49] In fact, a handful of Post-Keynesian authors cite Keynes' positive remarks on Gesell as an implicit proof of their interpretation (Cowen and Krozner, 1994, pp. 387-388; Argitis, 2008, pp. 251-253; Davidson, 2000, p. 49).

Such an approach is not entirely new. In his doctoral dissertation in 1940 and two subsequent articles in 1942, Dillard was the first economist to demonstrate the close kinship between the monetary theories of Proudhon, Gesell, and Keynes. Dillard established striking theoretical similarities between Keynes, Gesell and the anarchist Proudhon (Dillard, 1942b, pp. 75-76), with Gesell 'primarily interesting as the link between the other two' (Dillard, [1940] 1997, p. 6). In a further article on Keynes' political economy, Dillard (1946, p. 149) argued that 'Keynes' judgement of the relative merits of Marx and Gesell, [...], would seem to reveal much more about Keynes than it does about either Marx or Gesell' and in his book on Keynes, Dillard (1948, pp. 322-323) maintained that studying Gesell indeed furthers the understanding of Keynes's theoretical innovations. However, as Gischer (1997, p. 5) pointed out, Dillard's pioneering research concerning link between Proudhon, Gesell and Keynes went mainly unnoticed, probably because academic debate about Keynesian ideas took off considerably later and maybe because it held an inconvenient truth for classical economist.

Still, a handful of authors have taken up Dillard's lead. For example, Michel Herland (1977) traced the issue of hoarding running from Keynes over Gesell to French economist Boisguilbert (1646-1714) and elaborated in another article on Gesell's connection to Knut Wicksell, arguing that despite considerable theoretical differences Gesell took up parts of the Swede's analytical apparatus (Herland, 1992, p. 68). William Darity (1995) demonstrated the close kinship between Gesell and Keynes, not only in their economic theory making, but also in their political economy. The most

[49] 'In the General Theory the interest rate is a purely monetary phenomenon determined by the liquidity preference (demand for money) of the public in conjunction with the supply of money determined by the authorities' (Snowdon & Vane, 2005, p. 62). See also Davidson (2006, p. 6). See for further references Koutsobinas (2002, p. 1850).

radical view was put forward by Guido Preparata (2002), who stated in an article called 'On the art of innuendo: J. M. Keynes' plagiarism of Silvio Gesell's monetary economics', that 'Keynes stole the idea [of interest as a monetary phenomenon]' but stripped it of its radical implications as to preserve the existing capitalist order (Preparata, p. 2002, p. 219). However, their research was also hardly noticed in mainstream economics.

In what follows, I hope to convey the message that Keynes' appraisal of Gesell indeed supports the Post Keynesian rejection of orthodox Keynesianism and highlights those parts of his analysis where Keynes departed from classical thought. For it is obvious that Keynes himself explicitly praised those parts of Gesell's theory he – at least partly – agreed with. In doing so, I will draw on my own reading of both Gesell and Keynes as well as Dillard's rather forgotten work.

As was demonstrated above, monetary or effective demand is an important, albeit often neglected aspect of Gesell's theory. Nevertheless, Keynes recognized it clearly in Gesell's work as it is stated in his own deliberations on the subject:

'The great puzzle of effective demand with which Malthus had wrestled vanished from economic literature. You will not find it mentioned even once in the whole works of Marshall, Edgeworth and Professor Pigou, from whose hands the classical theory has received its most mature embodiment. It could only live on furtively, below the surface, in the underworlds of Karl Marx, Silvio Gesell or Major Douglas' (Keynes, 1936, p. 32).

Apart from this passage, there are no further references to Gesell's concept of monetary demand in the *General Theory*. One can only speculate why, but the most likely explanation is that, while Keynes believed Gesell theory of interest to be his original work, he credited Malthus for the concept of effective demand (Keynes, 1936, p. 32). Consequently, it is Gesell's original and idiosyncratic theory of interest he praises in particular.

‘Gesell's specific contribution to the theory of money and interest is as follows. In the first place, he *distinguishes clearly* between the rate of interest and the marginal efficiency of capital, and he argues that it is the *rate of interest which sets a limit to the rate of growth of real capital*. Next, he points out that the rate of interest is a *purely monetary phenomenon* […] , and that forms of wealth, such as stocks of commodities which do involve carrying charges, in fact *yield a return because of the standard set by money*’ (Keynes, 1936, pp. 355-356, [my emphasis]).

Both contested the view that interest is a premium for a temporary renunciation of consumption, and defined interest rather as a premium for parting with money (Keynes, 1936, pp. 166-174 and pp. 222-244), which checks capital accumulation. However, while Gesell’s theory was based on the rather simple idea that money does not have carrying costs, Keynes introduced the rather complex notion of liquidity preference, which is caused by our inability to predict the future accurately, rendering investments in capital assets risky (Keynes, 1937a, pp. 215-216). Consequently, according to Keynes, the main failure of classical economics was the failure to recognize interest as a monetary phenomenon.

‘Now I range myself with the heretics. I believe their flair and their instinct move them towards the right conclusion. [….] There is, I am convinced, a fatal flaw in that part of orthodox reasoning […] due to the failure of the classical doctrine to develop a satisfactory and realistic theory of interest’ (Keynes, 1935, p. 36).

As Dillard (1948, p. 316) put it, by the 1930s, Keynes had become a ‘self-acknowledged heretic’ and his endorsing reference to Gesell are strong evidence for that claim. Indeed, in three articles appearing after the publication of the *General Theory*, he strongly defended his idea of interest as a purely monetary phenomenon, apparently believing in 1938 that his theory of interest was beginning to be accepted by mainstream economist (Dillard, 1946, p. 140).[50] In fact, Keynes radical rejection of classical notion of interest is not only evident in his praise of Gesell, but also in his own remarks on capital:

'It is much preferable to speak of capital as having a yield over the course of its life in excess of its original cost, than as being productive. For the only reason why an asset offers a prospect of yielding during its life services having an aggregate value greater than its initial supply price is because it is *scarce; and it is kept scarce because of the competition of the rate of interest on money*. If capital becomes less scarce, the excess yield will diminish, without its having become less productive at least in the physical sense.

I sympathise, therefore, with the pre-classical doctrine that everything is produced by labour, […]' (Keynes, 1936, p. 213 (my emphasis]).

As with Gesell, the monetary rate of interest has a determining influence on real capital.

'It seems, then, that the *rate of interest on money* plays a peculiar part in setting a limit to the level of employment, since it sets a standard which the marginal efficiency of a capital-asset must attain if it is to be newly produced' (Keynes, 1936, p. 222 [italics in the original]).[51]

In short, concerning the amount of real capital, Keynes postulated that 'the rate of interest on money is a kind of institutional monopoly which leads to an artificial scarcity of capital assets' (Dillard, 1948, p. 194). As with Gesell, Keynes thought that real capital yields interest because of excess demand:

[50] Besides the already quoted Keynes (1937a), he also defended his view in an article in The Economic Journal where he stated '[…] the rate of interest is that rate at which the demand and supply of liquid resources are balanced. Saving does not come into the picture at all (Keynes, 1937b, p. 668). Concerning the perceived acceptance of his theory, Keynes (& Robertson, 1938, pp. 318-319) wrote: 'Now that we have got away from the idea of the rate of interest being depended on saving and have reached the idea of its being in some sense a monetary phenomenon, the remaining difference of opinion cannot be fundamental and agreement should be within reach.'
[51] This argument was explicitly restated by Keynes (1937a, pp. 222-223): 'Thus, instead of the marginal efficiency of capital determining the rate of interest, it is truer (tho not a full statement of the case) to say that it is the rate of interest which determines the marginal effiency of capital'.

‘The owner of capital l can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But, whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital’ (Keynes, 1936, p. 376).

These comments led Dillard (1948, pp. 195-196) to conclude that Keynes’s view of capital and interest implied a fundamental criticism of the existing social order, as the money possessors received unearned income, while impeding full employment and the growth of real capital, a view strikingly similar to Gesell’s vision as laid out above, and therefore Dillard (1948, p. 333) positioned Keynes’ close to utopian socialism. Even more, Darity (1995, p. 27) argued that in large parts of the *General Theory*, ‘Keynes was a mere Gesellist’. To what extent this is correct remains a matter of debate, but what is certain is that Keynes and Gesell shared the same goal of finding a middle path between Marxism and what they regarded as rentier capitalism (see also Darity, 1995, p. 39), a fact Keynes himself highlighted in his conclusion to the *General Theory*:

‘Thus, I agree with Gesell that the result of filling in the gaps in the classical theory is not to dispose of the 'Manchester System', but to indicate the nature of the environment which the free play of economic forces requires if it is to realize the full potentialities of production’ (Keynes, 1936, p. 379).

Many of Gesell’s followers consider such an endorsement by probably the most prominent economist of the 20th century as proof of the importance of Gesell (Onken, 2008, p. 109). [52] However, they tend to ignore that Keynes also put forward some direct criticism, stating that ‘there is a great defect in Gesell’s theory’ because ‘the notion of liquidity-preference had escaped him’, calling Gesell’s theory only ‘half a theory of interest’ (Keynes, 1936, p. 356). Obviously this criticism is grounded on Gesell’s failure to understand the role of uncertainty in determining liquidity preference and hence the demand for money (Meltzer, 1988, p. 197). Consequently, Keynes rejected Gesellian

[52] Further references include Betz (2005, pp. 13-18), Flik (2004, p. 127), Senf (2007, p. 241).

currency reform. Even if Gesell had correctly described that the rate of interest on money limits capital accumulation, depreciative currency would not solve the issue at hand, because Keynes recognised that money was not unique in having a liquidity premium attached to it, but that it had only a greater premium than any other article (Keynes, 1936, pp. 357-358). He was well aware that taxing currency would create substitutes which would then serve as medium of exchange, at least in the long run, and would, therefore, not be sufficient to secure full employment (Keynes, 1936, p. 358; see also Darity, 1995, p. 38). Therefore, Keynes, albeit praising the theoretical concept of interest being a monetary phenomenon, dismissed the practical feasibility of negative interest rates and social reform as proposed by Gesell:

'Nevertheless, he had carried his theory far enough to lead him to a practical recommendation, which may carry with it the essence of what is needed, though it *is not feasible in the form in which he proposed it*' (Keynes, 1937, pp. 356-357 [my emphasis]).

Given the above depicted interpretation of the General Theory, I maintain that the 'essence' Keynes refers to is in fact the gradual reduction of the monetary determined rate of interest to zero, which Gesell hoped to achieve via money tax. In Keynes' (1936, p. 221) own words:

'If I am right in supposing it to be comparatively easy to make capital-goods so abundant that the marginal efficiency of capital is zero, this may be the most sensible way of gradually getting rid of many of the objectionable features of capitalism.'

Concerning the practical implementation, Keynes advocated rather moderate changes to reduce interest rates and to secure full employment. Dillard (1948, pp. 327-329) counts three immediate proposals: (1) progressive taxation, raising the propensity to consume, (2) lowering money interest rates through expansive monetary policy, and (3) the partial socialisation of investment, the latter being the most important measure contained in the proposal:[53]

'In some other respects, the foregoing theory is *moderately conservative* in its implications. [….] I conceive, therefore, *that a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment*; […]. I see, therefore, *the rentier aspect of capitalism as a transitional phase* which will disappear when it has done its work' (Keynes, 1936, pp. 377-378 [my emphasis]).

Thus, Keynes did not adhere to the anarchist ideals of Gesell, even though he shared Gesell's rejection of interest as unjustified income. On the contrary, in Keynes' framework, the state would be essential in stimulating investment and a simple change in the monetary regime as advocated by Gesell, would not be sufficient. However, as Dillard (1948, p. 333) pointed out, Keynes did not live long enough to offer his own solution to the shortcomings of capitalism, as he readily admitted himself:

'But I consider that my suggestions for a cure, which, avowedly, are not worked out completely, are on a different plane from the diagnosis. They are not meant to be definitive; [...]' (Keynes, 1937a, p. 221).

In sum, given the above presented analysis, Keynes' praise for Gesell's theory that 'the idea behind stamped money is sound' is not an endorsement for Gesell's idea of stamping money. The sound idea Keynes refers to is the concept of interest as a purely monetary phenomenon and the consequences for the capital endowment of the economy. Thus, by endorsing a world famous monetary heretic, Keynes tried to highlight the parts of his analysis where he had strayed from classical thought: that due to uncertainty there would be a liquidity driven interest rate that would keep the economy from reaching the optimal (full employment) capital stock where its marginal

[53] On this point see also Meltzer (1988, p. 305).

productivity and hence the interest rate would be zero (Meltzer, 1996). This situation was what he labelled the 'special' case of classical economics (Dillard, 1948, pp. 3-4). The link between Gesell and Keynes was fist clearly seen by Dillard during the 1940s but is today mainly forgotten. Indeed, Pigou (1936, p. 124) in one of the first responses to the *General Theory* saw the implications of Keynes appraisal of Gesell clearly:

'For example, on p. 355, he seems to agree with Gesell that "the rate of interest is a purely monetary phenomenon." If this were in fact his view, Mr. Keynes' divorce from classical thought would be complete.'

Conclusions

In his discussion of the merits of Gesell, Keynes (1936, p. 355) famously stated the following: 'I believe that the future will learn more from the spirit of Gesell from that of Marx'. So nearly 100 years after Silvio Gesell, are there any lessons to be learned from his contribution to economic theory? From a theoretical perspective, I believe that Gesell's theoretical insights, although intellectually challenging, offer little cure for today's economic problems. For example, since the world has left the gold standard, most countries have struggled with sometimes considerable rates of inflation, which as a matter of fact is a 'tax' on money, a fact that Gesell, living in the heydays of the Gold Standard, was seemingly unaware of. Moreover, Gesell's analysis is limited to money and does not take into account other (liquid) financial instruments such demand deposits, bonds, and precious metals and, as Keynes stated, a tax on money would lead to the appearance of money substitutes in the long run. However, the recent discussion of Gesell's stamped money proposal as a way for removing the zero bound to interest rates clearly demonstrates that his practical proposal can – in the absence of inflation – help to stimulate in the economy once nominal interest rates are near the lower bound.

For scholars of the history of economic thought, Gesell's theory nevertheless yields valuable insights into the *General Theory*. Keynes' repeated embracing comments on Gesell speak in favour of the Post Keynesian interpretation of Keynes' liquidity theory of interest – and to a lesser extent his principle of effective demand – as one of the central issues of the *General Theory*. However, critics may claim that Gesell appears only in a supplementary chapter and is therefore of little relevance for Keynes economics thinking. This argument is in fact a reversal of the burden of proof. If Keynes took the pain to read about and write five pages on the life and work of a well-known monetary heretic in such an embracing manner, those who deny their importance must provide evidence for that claim, especially since Keynes also mentions Gesell in a very positive tone in two key parts of the General Theory: the chapter on effective demand and the conclusion.

Therefore it is plausible to assume that Keynes' attitude towards Gesell can tell us important things about the former's theory, a fact that was recognized by Dillard in the 1940s, but failed to influence the outcome of the debate about the essence of the *General Theory*. Thus, Keynes' extensive praise of and theoretical similarities with Gesell lends new credibility to the claim made by the Post Keynesian School, but also various scholars of the history of thought, that there was never such a thing as a 'Keynesian Revolution' in mainstream macroeconomics (Davidson, 2005, pp. 451-452; see also Laidler, 1999) and that the countercyclical fiscal policies associated with Keynes are just 'Keynesian' by name, not by substance. A closer examination of the Gesell-Keynes connection, skilfully presented by the late Dudley Dillard 1940s, could have underlined this point. In particular in this respect, Gesell is indeed a 'strange, unduly neglected' anarchist theorist.

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