

**TRANSNATIONAL CORPORATIONS
IN A GLOBAL MONETARY THEORY OF PRODUCTION:
A WORLD-SYSTEMS PERSPECTIVE**

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ABSTRACT

In this paper, I argue that it is possible to enrich world-systems analysis with a heterodox Keynesian monetary theory of production known as the Theory of Money Emissions, based on the views put forward by the French economist Bernard Schmitt. In the aftermath of the global financial crisis, I aim to rehabilitate and adapt the old Keynesian proposal of an international clearing union to the modern world-system by providing a rationale behind a common world currency and a renewed perspective on money and transnational production.

INTRODUCTION

Social science can no longer avoid a global theory of money given its universal nature as a social construct. It is thus crucial to investigate its role in world-systems analysis. Chase Dunn (2005:171) has emphasized the importance of money among other geopolitical, economic and ideological dimensions. Hicks (1967:153) argued that monetary theory goes beyond the subject of economics by stressing the conceptual links with History. Money is not just, and not even in essence, an economic good but the outward expression of the community as a whole. Its theoretical boundaries therefore need to be examined within a renewed monetary theory of production (Keynes 1933). While “a global society as a world association of peoples, nation states, supranational unions, international organizations and transnational communities” (Martinelli 2005:241) has been acknowledged in world-systems research, little has been done to investigate the outward monetary expression of this emerging transnational community. Would it entail the creation of a common or a single currency? Would the rationale behind such an instrument stem from a vast collection of nation-states or from the rise of transnational production? Finally, should it be managed by an independent supranational central bank or by a consortium of nation-states?

To help address these questions, I shall consider a heterodox approach developed since the 1960s by a French economist, Bernard Schmitt, namely the theory of money emissions (TME) also known as quantum macroeconomics. Although the TME constitutes a powerful elaboration upon the very nature of bank money, it remains rooted in a State-centric perspective whereby it overlooks the exponential rise of transnational corporations (TNC). I will present a rationale

behind the rehabilitation of the Keynesian international clearing union (ICU) with a firm grounding for the introduction of a world currency monetising transnational production. I will also argue that a global-spanning macroeconomic analysis of TNCs does not weaken the rationale behind a common world currency; on the contrary, it reinforces it. The endeavor I wish to initiate is thus the inclusion of TNCs in an often-neglected heterodox Keynesian framework and the evaluation of its contribution to world-systems.

This paper is also motivated by the astonishing observation that financial globalization has turned into “a brakeless train wreaking havoc” (Harvey 1995) leading to the demise of the global system of unregulated financial markets in 2007-2008 thereby fulfilling the prophecy of Georges Soros (1997). In today’s chaotic international monetary system wherein “the main currencies float and crush against each other like continental plates” (Soros 1997:48), I wish to echo Volcker’s claim that “if we are going to be successful in a globalized world, we should have an international currency” (Veon 2005). Likewise, as Zhou Xiaochuan (2009), governor of the People's Bank of China, the new power player on the global financial stage, recently argued:

The desirable goal of reforming the international monetary system, therefore, is to create an international reserve currency that is disconnected from individual nations and is able to remain stable in the long run, thus removing the inherent deficiencies caused by using credit-based national currencies.

In times of financial chaos, unresolved tensions between currency hegemony, national sovereignties and transnational production call for a paradigm shift. In a deeply unstable world undergoing radical transformation following the global demise of three decades of deregulation, the stakes are high for world-systems research.

Section 1 briefly states the problem. Section 2 reviews the old Keynesian idea of an International Clearing Union. Section 3 roots the analysis in a powerful and often neglected heterodox approach, namely the theory of money emissions. Section 4 examines the rise of transnational production and the relevant units of analysis in a globalized economy. Drawing on these combined analytical inputs, section 5 provides a rationale behind a common world currency and section 6 concludes the essay.

STATEMENT OF THE PROBLEM

With almost 6.7 billion people in the world today (UNCTAD 2008a), there are at least 182 current official or de facto currencies in the 192 United Nations member countries (Antweiler 2008). While the emission of money is still largely a prerogative of nation-states in the current international system of payments, the emerging reality of the European monetary union reinforces the idea that currency areas are no longer systematically equated with national territories as argued by Ponsot (2004):

The way economic areas are determined is not fortuitous. Since the advent of organized political areas around the nation-states, the correlation of monetary and production areas underpins the one currency / one nation notion [...]. If today the nation-state still constitutes the main framework for the fusion of monetary and

production areas, it does not represent the sole framework thereof. It was preceded by other modes of fusion (communities, primitive societies...) and will undoubtedly be followed by others. The one currency / one nation principle is increasingly challenged. Several factors are contributing to its collapse: globalization, the euro zone, the development of parallel currencies and dollarisation (our translation).

The State-centric approach to money remains rooted in the mind of economists. For instance, the state theory of money, also known as chartalism (Knapp 1924; Wray 2000), has attempted to show how “[h]istory reveals the role of the public authority in establishing a universal equivalent for measuring debts and in determining what “thing” will be used to correspond to this accounting measure” (Tcherneva 2005:6). Chartalism’s fundamental proposition is to reaffirm the leading role of the State in the definition of money through the choice of the unit of account and the enforcement of its legal acceptability. I partially agree with the idea of “money as a creature of the State” (Lerner 1947) insofar as it stands up to historico-empirical scrutiny. Historically, the State is the institution with “the right not only to enforce the dictionary but also to write the dictionary” (Keynes 1930:5). Drawing on this metaphor, I choose to address the following question: could contemporary currency areas be structured around a common world currency akin to a monetary Esperanto and could we view this dramatic political, socio-economic and institutional breakthrough as the logical outcome of globalization? Although the social and political forces in the world-system have long circumscribed this project to the mere exploratory and theoretical domain, the inclusion of transnational production into post-Keynesian theory must now be urgently performed in order to catch up with the tremendous evolution of world-systems over the last decades (Wallerstein 1993). The idea of a world currency is not a new one. In this respect, I review in the next section the old Keynesian solution to the problem of the coexistence of multiple currencies.

THE KEYNESIAN SOLUTION: THE INTERNATIONAL CLEARING UNION

The constitution of a new financial and monetary order was already high on the agenda of world political leaders at the end of World War II. The issue of the sustainability of a domestic currency playing the role of an international reserve currency was addressed during *The United Nations Monetary and Financial Conference* that was held in Bretton Woods, New Hampshire, USA in July 1944. Following some intense negotiations, the necessary agreements were signed to establish the foundations of the major international economic organizations of our time. The conference gave birth to the Bretton Woods system of exchange rate management, an international monetary order that remained in place for almost three decades throughout the post-war period. Moreover, as stated by Köhler (2004):

When plans for the IMF were first discussed, the competing Keynes and White plans both sought to provide assurance that there would not be a return to the pre-war pattern of destructive economic practices.

The two sides shared common political ideals of peace and stability. However, U.S. Treasury official White designed a strategy that contrasted sharply with Keynes's. While the White plan (1942) aimed at the creation of an international financial institution whose objective was the stabilization of exchange rates, Keynes's (1980:189) proposal was far more ambitious and innovative insofar as its underlying logic included a framework for global governance:

The Clearing Union might become the instrument and the support of international policies in addition to those which it is its primary purpose to promote. This deserves the greatest possible emphasis. The Union might become the pivot of the future economic government in the world.

The two plans rested on rather contrasted underlying assumptions. White had identified a balance of payments deficit to a problem circumscribed to the debtor country whereas Keynes considered that such a macroeconomic imbalance, with its potential adverse impact on economic policy, was problematic for both surplus and deficit countries. In fact, Keynes and White had a very different understanding of the nexus of debtor / creditor relations between countries in the international political economy (Skidelsky 2000:245):

The White and Keynes Plan were based on different concepts. The Stabilisation Fund made loans out of subscribed capital; the Clearing Union created overdrafts out of nothing. In the Fund a member's maximum liability was fixed by its subscription; in the Clearing Union a member might be required to accept 'bancor' (in payment for its exports) up to the total of all the other members' overdraft facilities.

Keynes's (1980:169) objective was to address the financial needs of nations by introducing an international currency to help countries overcome their short-term liquidity constraints:

We need a method by which the surplus credit balances arising from international trade, which the recipient does not wish to employ for the time being, can be set to work [...] without detriment to the liquidity of these balances to their holder's faculty to employ them himself when he desires to do so.

By stressing the accounting nature of money, the ICU was also in line with Keynes's (1937:209) finance motive that contrasted sharply with the classical conception of investment subject to the a pre-existing saving constraint:

"Finance" has nothing to do with saving. At the "financial" stage of the proceedings no net saving has taken place on anyone's part, just as there has been no net investment. "Finance" and "commitments to finance" are mere credit and debit book entries, which allow entrepreneurs to go ahead with assurance.

The mechanism of the ICU is described hereafter (Iwamoto 1997:183):

The ICU is based upon the "banking principle" whose assets are its reserves and loans to the central banks of member countries and whose liabilities the deposits of central banks. The "Bancor" is a new international currency created by the ICU. Each country is given a quota and allowed overdrafts according to this quota. [...] The surplus countries have a credit balance with the ICU and deficit countries have a debit balance. In other words, the imbalance of the balance-of-payments is reflected in the accounts of the ICU as overdrafts for the debtors and positive balances for the creditors".

The ICU would have become the principal means for an expansionist world trade policy (Keynes 1980:176) favoring high levels of effective demand throughout the world: "[t]he principal object can be explained in a single sentence: to provide that money earned by selling goods to one country can be spent on purchasing the products of any other country" (Keynes 1980:270). However, the Bretton Woods conference eventually witnessed the triumph of the White plan aimed at the expansion of free trade by promoting the interests of the United States as the first world trade power. From a geopolitical perspective, this was then interpreted as the dominance of the American influence in the world political arena (Hobsbawm 1996).

Today, the US economy has become the world's largest debtor. Excess private and public consumption along with negative saving rates in the United States are financed by the transfer of real resources from capital-exporting surplus countries such as the Asian economies. Until the recent global meltdown, the American consumer felt that he could indefinitely purchase the goods of major exporting countries such as China, as Asian central banks are depositing massive amounts of accumulated reserves in low-yielding U.S. government securities. This unstable situation resulting from unsustainable global macroeconomic imbalances rests on the continued confidence in the value of the US dollar, and its hegemonic role as the world's leading reserve currency. Recent events such as the global credit crisis, the ongoing EU-enlargement and other signs of a dramatic shift towards a multipolar world might impede this hegemony. Hence, one should no longer rule out the scenario of a faltering confidence in the US Dollar (Wallerstein 2008).

MONEY AND PRODUCTION IN THE THEORY OF MONEY EMISSIONS

A revisited Keynes plan would face different political, economic, and social challenges today. Before addressing the complex and multidimensional issue of globalization, I claim that any breakthrough in the understanding of the modern world-system requires a reflection on the underlying monetary theory of production. I center my reflection on an often-neglected heterodox framework namely the Theory of Money Emissions (Schmitt 1960, 1966, 1975, 1977, 1984, 1996).

An Overview of the Concept of Money in the TME

The TME is an abstract framework based on a renewed conception of money wherein the emphasis is on its circulatory nature that enables the circulation of commodities. More than two centuries ago, Adam Smith (1776:chap 2) understood that "the great wheel of circulation is

altogether different from the goods which are circulated by means of it. The revenue of the society consists altogether in those goods, and not in the wheel, which circulates them". In a surprising theoretical lineage, Schmitt (1984) confirms that the only way to apprehend the essence of bank money as an instrument of circulation is to identify money *per se* to an instantaneous flow (that which sets Smith's great wheel of circulation in motion) and not to a stock of wealth, akin to money's worth when kept idle between payments. As groundbreaking as it may seem, money is viewed by Schmitt as an instantaneous event that does not survive the payment occurring during a transaction between two economic agents in a capitalist economy (Cencini 2001:76; Rossi 2006:124). The TME sets apart the conceptual object that operates as a means of payment and the one that serves as a temporary abode of purchasing power. The clarification is not merely semantic for it introduces a crucial ontological distinction that enhances our understanding of bank money although it contrasts with the common-sense idea that money and deposits are synonyms. As previously stated, bank deposits do not cease to exist between payments although it is then preferable to refer to money balances rather than money *per se*: "money and payments are one and the same thing. No money, if correctly defined, exists either before or after a given payment" (Schmitt 1996:88). In fact, while bank deposits have a positive duration in time, it only takes an infinitesimal instant (i.e. a zero duration in time) to enter a payment in a computerized system of bank accounts (Rossi 2006:124).

Notwithstanding the remaining tangible forms of money such as coins, notes and parallel currencies, banks are the only institutions endowed with the right to issue legally acceptable payments in our era of dematerialized money, by using the accounting principle known as double-entry bookkeeping (Rossi 1998:37). In fact, bank entries set forth Smith's modern wheel of circulation thereby giving rise to the effective circulation of goods and services within the economy. In order to grasp the nature of bank money, it is crucial to stress its accounting nature (Keynes 1937). While double-entry bookkeeping consists of recording payments, the visible accounts only show the resulting balances (whether positive or negative), which are the mere outcome of payments and not money *per se*: "double-entry accounting records the result of monetary flows and not the flows themselves" (Rossi 1998:36). However, this heterodox conceptual breakthrough should not be identified to a set of neoclassical equilibrium conditions. The simultaneity of money and payments is in fact a fundamental law of bank money and holds true regardless of the idiosyncratic features of agential behavior (Cencini 1995:18).

The TME as an Alternative Conception of Production

The TME requires a distinctive conception of time that stands in sharp contrast with the timeless mathematical framework of General Equilibrium theory (wherein markets clear instantaneously with the help of a mysterious, external and omniscient auctioneer). It also goes beyond the observable and continuous (or historical) time wherein production activities take place. The TME therefore puts forward the idea of a quantum of time, that is an abstract interval withheld from continuous time that defines a product in economic terms. The product is the end-result of the process that takes place in continuous time $[t_0, t_n]$ but only comes into existence, as an economic event, in t_n . In a wave-like emission, the instantaneous existence of production in t_n absorbs the whole period $[t_0, t_n]$, which leads to this fascinating and logical conclusion: on a quantum of time, production does not *take place in* time but it actually *is* time (Schmitt, 1984:54). Interestingly, at any instant in continuous time before the full completion of the product, production *per se*

remains nil in absolute terms. It is nonetheless a physical process in motion, which presupposes the existence of an intellectual project whose final realization will retroactively define a quantum of matter and energy in the productive sphere through the conceptual absorption of the corresponding interval (Schmitt 1984:54). This renewed approach is partly inspired by the philosopher Bergson (1946) and requires that, unlike its continuous time alter ego, production be defined positively on any point of this quantum. Hence, economic reasoning calls for a conception of time that simultaneously captures the instant at which production becomes a positive action (i.e the full realization of the project) as well as the corresponding quantum (i.e the spatiotemporal process in its totality).

Cencini (1985:74) claims that quanta of time are a logical necessity in economic theory. Production is defined anew by transforming a continuum of time into a quantum. Every production defines a quantum, a real and instantaneous emission, which ‘quantises’ time (Schmitt 1984:54). This approach fits well into the framework of a monetary theory of production advocated by Keynes (1933) since production may be considered as the primary economic operation that necessarily precedes any exchange (Schmitt, 1975:11). After conceptualizing production as a quantum of time, money is integrated as a numerical form that gives birth to the homogeneity of all produced goods and services (Rossi 2001:122-7). Money acquires a positive value and therefore a positive purchasing power over economic output through its conceptual association therewith (Cencini 2001:117). To borrow de Saussure’s linguistic perspective (1916), goods and services are “signified” objects while money is the ultimate “signifier”. However, this metaphor discards the notion that members of a community use words (i.e monetary signs) to refer to an objectified reality (i.e economic output) with a shared identical meaning (i.e value-substance).

In the TME, money is merely an incorporeal standard that provides the economy with numbers and enables the holistic measure and the circulation of economic output (Schmitt 1975:15). By stating that output lacks any homogeneous value-substance (Cencini 1985:91), the TME draws on Keynes’s ideas (1936:38) and stands in sharp contrast with the methodology of neoclassical economists and their widespread concept of utility incorporated to sophisticated mathematical functions. By the same token, the ontological rejection of a measurable value-substance enshrined in commodities discards the Marxian idea of abstract labor defined as a homogeneous magnitude in the Labor Theory of Value.

Capital Accumulation in the TME

An extensive part of Schmitt’s work deals with capital accumulation and resulting pathologies such as inflation and unemployment that are bound to arise without an orderly system of payments. However, those macroeconomic ills are not due to agential behavior as unconvincingly explained by neoclassical economists but to a monetary and institutional anomaly that affects the process of capital accumulation. In this sense, the TME differs from endogenous growth theory that emphasizes the microeconomic foundations of macroeconomics by constructing mathematical representations of growth trajectories (based on utility-maximizing households and profit-maximizing firms). In fact the TME is not a growth theory and therefore does not address the economic impact of innovation, technological change, human capital and spillover effects. Instead, the real contribution of Schmitt to our understanding of capital accumulation is a renewed analysis of profits, which he argues to be artificially duplicated in the process of income-

formation thereby generating a deposit that never dries up (Schmitt 1984:323). Once capital accumulation has reached unsustainable levels, financial funds are no longer channelled effectively to the industrial sphere where this translates into reduced investments and higher unemployment. A parallel exists with Arrighi (1999:223):

Capitalist organizations respond to the overaccumulation of capital over and above what can be reinvested profitably in established channels of trade and production by holding in liquid form a growing proportion of their incoming cash flows. This tendency creates (...) the "supply conditions" of financial expansions, an overabundant mass of liquidity that can be mobilized directly or through intermediaries in speculation, borrowing and lending.

But while Arrighi (1999) develops a second tendency of the capitalist system to promote intense inter-state competition in order to capture a fraction of the capital that accumulates in financial markets, the world-system perspective is absent in Schmitt who views the international economy as a mere exchange-economy wherein the formation of purchasing power is circumscribed to national economies.

I was partly motivated to write the present paper due to this perceived shortcoming of the TME that is still rooted in a state-centric perspective. I now venture into ontological territory by claiming that the differing time-horizon and philosophical stance adopted respectively by the TME and world-systems analysis may account for these contrasted representations of the world. The former is a heterodox Keynesian theory concerned with the short and medium-term objective to stabilize a capitalist system deemed intrinsically unstable under the free interplay of unregulated market forces. The latter adopts a panoramic and long-spanning view *à la* Braudel (1979) in order to single out the stages of development of the world-system subject to both economic and *non-economic* forces. While social change is at the heart of world-systems analysis, its ultimate aim cannot be understood exclusively in terms of the stabilization *per se* of world-systems regardless of their multidimensional and long-term dynamics. I therefore argue that further works are needed to explore the feasibility of a potential merger between the two frameworks.

TRANSNATIONAL PRODUCTION IN THE MODERN WORLD-SYSTEM

It is worthwhile stressing that, in spite of their crucial importance for our analysis, the following definitional elements of transnational contemporary dynamics are seemingly unrelated to the TME for Schmitt had originally overlooked these fundamental issues in his framework. Nevertheless, I will argue in section 5 that the two lines of research may be reconciled in a fruitful reflection on the world-system.

A transnational corporation is an enterprise that controls assets of other entities in economies other than its home economy. An equity capital stake of 10% or more of the ordinary shares or voting power for an incorporated enterprise, or the equivalent for an unincorporated

enterprise, is normally considered a threshold¹ for the control of assets (UNCTAD 2004; Letto-Gillies 2005:11-2). Dicken (2003:198) underlines the existence of numerous forms of collaborative ventures that account for alternative means of control and coordination and therefore suggests a broader definition that goes beyond the mere ownership criterion of productive assets located abroad: “a transnational corporation is a firm which has the power to co-ordinate and control operations in more than one country, even if it does not own them”. The financing and operational management of transnational projects often espouse the dynamics of the political, economic and technological environment by driving many TNCs to focus on their core competence in the home country while outsourcing the additional functions in the periphery. The resulting outsourcing services are offered using various delivery models comprising onsite consulting and offsite execution. A new mantra is the Build - Operate and Transfer (BOT) model, notably in the infrastructure and construction industry of emerging economies. The scheme implies that the client has a right to own the facility, while the third-party vendor builds it, hires the employees, gets the operation running for a period of 3-5 years before handing the operations over to the client. Alternative schemes (e.g: BOO and BOOT) may involve a reduced role or a lagged intervention of the Government. The hallmark of this type of project financing is a renewed credit-assessment based on the project’s earnings as the principle source from which loan repayments are made as opposed to the creditworthiness of the borrowing entity. This entails a modification in the creditor/debtor relationship, referred to as limited recourse financing; lenders are no longer given full security against the borrowers and have to hedge the residual risks on international financial markets. I now focus on the transnational corporation “whose organizational structures transcend polities and connect various national societies” (Herkenrath and Bornschier 2003).

Genesis and Evolution of Transnational Corporations

As Greer and Singh (2000) state:

The earliest historical origins of transnational corporations could be traced to the major colonizing and imperialist countries of Western Europe, notably England and Holland. The process began in the 16th century and continued for the next several hundred years. During this period, firms such as the British East India Trading Company were formed to promote the trading activities and territorial acquisitions in the Far East, Africa, and the Americas.

However, the meaning of TNCs provided here is more recent (Greer and Singh 2000):

The transnational corporation as it is known today, however, did not really come into being until the 19th century. With the advent of industrial capitalism in the 19th and early 20th century, the search for resources including minerals, petroleum, and agricultural commodities as well as pressure to protect and

¹ This threshold is rather conventional and arbitrary. In some countries, an equity stake of other than 10% is still used. In the United Kingdom, for example, a stake of 20% or more was the threshold until 1997.

enlarge markets propelled transnational expansion by companies exclusively from the United States and a handful of Western European nations.

The tremendous growth of American Business expanding abroad between 1897 and 1902 was met with resistance by British commentators and politicians alike who had understood the imperialist function of this American corporate momentum as shown by three London publications in 1901-1902 entitled respectively *The American Invasion*, *The American Invaders* and *the Americanization of the World* (Wilkins 1970:71). A century later, American CEOs are standing behind the flagship of globalization and transnational production in their public relations strategies: “Ford isn’t even an *American* company, strictly speaking. We’re global. We’re investing all over the world. Forty percent of our employees already live and work outside the United States and that’s rising. Our managers are multinational. We teach them to think *globally*” (A. Trotman, CEO of Ford in Reich 1997:275, italics in the text). This quote seems to support the controversial view of TNCs depicted as stateless corporations despite their apparent national and cultural rootedness (Faux 2006:168-9). TNCs possess the ability to adapt to numerous country environments to pursue their global competitive interests (Clarke 2003:71). However, the stateless TNC hypothesis is often questioned by social scientists who suspect the existence of a hidden agenda of States behind these supposedly stateless corporate interests and argue that Ford (in the case at hand) is still an American corporation for embeddedness remains a decisive factor of national differentiation (Dicken 2003:199). Arguably, the broader and more consensual picture would be one of “TNCs significantly shaped by their embeddedness in distinctive national-institutional complexes, both of their country of origin and of the host business systems in which their subsidiaries operate” (Ferner, Quintanilla & Sánchez-Runde 2006). By all means, TNCs have become the main creators and transferors of physical and often knowledge-based assets (Dunning 1997) and the essential drivers shaping world output (Dicken 2003:198).

What are the Relevant Units of Analysis in a Globalized World?

It is under US hegemony after WW2 that the pattern of cross-border production and world market competition started to reflect the strengthening of the competitive position of TNCs. An important phenomenon has been the rise of intra-firm trade that is cross-border trade taking place within TNCs and their affiliates (Faux 2006:208). However, the corresponding transactions should not be confused with international trade (Arrighi 1982:77):

[...] the international mobility of entrepreneurship, money capital, and commodities, which is recorded as international trade [...] is not trade at all but transactions internal to, and determined by, the organizational networks of established or in-the making TNCs.

Despite recurring data inadequacies, “[i]ntra-firm trade account[ed] for around one-third of goods exports from Japan and the United States, and a similar proportion of all US goods imports and one-quarter of all Japanese goods imports” (OECD 2002). The decisive socio-economic contribution of TNCs to the globalization process is certainly not new. Arrighi (2000:118) argues that the balance of power between states and TNCs began a mutation several decades ago:

With the growing number and variety of corporations that organize their profit-making activities across state boundaries. The idea that the emergence of a system of multinational corporations undermines the power of states has been around ever since Charles Kindleberger declared that this emergence meant that the nation-state was “just about through as an economic unit”.

Wallerstein (1995:24-5) therefore questions the alleged novelty of the relations between TNCs and States, which have a taste of *déjà-vu*, being akin to previous waves of globalization in the sixteenth and nineteenth centuries. A well-known argument is the ability to circumvent national regulations (Kentor 2005:265):

The corporate headquarter-foreign subsidiary linkages that emerged as a result of this process of production dispersion have formed the basis for a new dimension of economic power. It has allowed the transnational corporation to circumvent, to a significant extent, the regulation of their activities by the nation-states within whose boundaries they are located.

By all means, “it is evident that transnational corporations represent a relatively new and worthwhile dimension of study for understanding the relationships among nations and the increasing integration of the global economy” (Kentor 2005:263). TNCs facilitate the globalization of capital and production and give rise to “a degree of functional integration between internationally dispersed economic activities” (Dicken 1998:1). The alleged newness of current globalization is therefore ill-founded due to a lack of historical perspective (Hirst and Thompson 1996:37-8; Arrighi 1999:217-51). Nonetheless, the sheer density and global interconnectedness achieved by modern technology-driven TNCs constitute unprecedented phenomena as illustrated by the following description of the globalization of R&D activities (UNCTAD 2005:120):

Since 1993, Motorola established the first foreign-owned R&D lab in China, the number of foreign R&D units in that country has reached some 700. The Indian R&D activities of General Electric – the largest TNC in the world – employ 2,400 people in areas as diverse as aircraft engines, consumer durables and medical equipment. Pharmaceutical companies such as Astra-Zeneca, Eli Lilly, GlaxoSmithKline, Novartis, Pfizer and Sanofi Aventis all run clinical research activities in India. From practically nothing in the mid 1990s, the contribution by South East Asia and East Asia to global semiconductor design reached almost 30% in 2002. STMicroelectronics has some of its semiconductor design done in Rabat, Morocco. General Motors in Brazil competes with other GM affiliates in the United States, Europe and Asia for the right to design and build new vehicles and carry out other core activities for the global company. There are many such examples.

What are the implications on national sovereignty matters, whether TNCs are viewed as stateless entities or country-dependent firms subject to a multidimensional influence of their home country (and of their host-countries)? This raises the crucial issue of the legitimacy of the

State in a globalized world. In spite of the increasingly significant role played by TNCs in the current wave of globalization characterized by unbridled international capital flows resulting in “the precariousness of the domestic political systems (Hobsbawm 1994:9-10)”, scholars in political economy argue that “the reports of the death of the national economy are greatly exaggerated” (Wade 1996); similar ideas are expressed by Porter (1990:19) and Dicken (2003:122). More recently, nation-states in the core of the world-system have been significantly strengthened in the wake of the global financial turmoil. In the aftermath of this “once-in-a-century credit tsunami” (Greenspan: 2008), the UNCTAD (2008b) was advocating pro-active and more coordinated policies. Following the 2007-2009 global financial storm and despite spectacular precedents of countries rescued by the IMF in the 1990s (e.g: Argentina and Russia), it will be trivial to dismiss any near-future scenario of a demise of the State (Navari 1991; Singh 2001) in the core of the world-system. Whether the balance of socio-economic power tilts in favor of the increasing significance of TNCs at the expense of nation-states or retains a more complex form of dynamic equilibrium, the State remains of utmost relevance both in times of transnational economic expansion and of crisis and chaos (Arrighi and Silver 1999). In the early 1980s, the demise of the US imperialist order paved the way for a more complex ensemble of supranational market forces. At the time, Arrighi (1982:61) could not see any end in sight of the neoliberal paradigm for ‘no viable political alternative to the economic “internationalism” of core capital has emerged in world politics so far’ (Arrighi 1982:108). However, Wallerstein (2008) recently argued that the current meltdown is likely to resonate as a prophetic epitaph of the capitalist world-system. However, I do not predict that the effects of the internationalization of production will be merely cancelled out by the ongoing redistribution of power between the major actors of the world-system. The latter include ailing financial institutions, struggling private operators experiencing a dramatic decline in creditworthiness, increasingly anxious households suffering from rising uncertainty and reduced purchasing power and finally a set of very heterogeneous States, being either re-empowered in spite of severe recession fears in the core of the world-system, or literally faltering in the periphery (e.g: Iceland, Russia or Indonesia...) whilst collectively trying to restore confidence in frozen-up credit markets. In this highly stimulating perspective of a multilateral reconfiguration of global governance institutions, it is arguably time for a wide-ranging consortium of States to espouse the patterns of the globalization of production by introducing a supranational numerical vehicle in order to monetise the income-generating activities of TNCs. The contribution of the TME to this ambitious endeavor is presented in the next section. Feasibility issues will be briefly discussed.

THE TME, A STEPPING-STONE FOR A COMMON WORLD CURRENCY?

Rethinking the International Financial System in the Light of the TME

My objective in this section is to draw on the TME and present a potential trajectory of the world-system as well as a proposal for a massive reform of international payments. Keynes (1980) once argued that this issue has never been satisfactorily dealt with:

The problem of maintaining equilibrium in the balance of payments between countries (...) methods of barter gave way to the use of money and bills of

exchange. During most of the period in which the modern world has been evolved [...] the failure to solve this problem has been a major cause of impoverishment and social discontent and even of wars and revolutions.

Interestingly, the International Monetary Fund (2000:37) has already expressed concerns about the sustainability of the current system while Stiglitz (2003:1) argues that the latter accounts for many of the ills of the world economy:

Something is wrong with the global financial system. One might think the system would shift money from rich countries, where capital is in abundance, to those where it is scarce, while transferring risk from poor countries to rich countries ones, which are most able to bear it. A well-functioning global financial system would provide money to countries in their times of need, thereby contributing to global economic stability.

Incorporating TNCs into the TME extends the analytical reach of real emissions. Therefore, a *transnational real emission* is both the abstract interval (i.e. the quantum of time) over which the transnational production process spans as well as its economic outcome (i.e. the end-product of the TNC). Aggregate transnational production is the sum of all transnational real emissions, defined as the countless chronologically and geographically overlapping quanta of time necessary to generate all the value added of TNCs. Despite the sheer complexity of transnational production due to its multidimensional fragmentation (Letto Gillies 2005), the distinction between standard and transnational real emissions can be unambiguously performed if the monetisation process put forward in the TME is consistent with the macroeconomic definition of wages, which "are not merely the result of an expenditure of money but the product of an expenditure of labor [...]. Workers emit real output and their wages are the result of the emission" (Schmitt 1984:95). Likewise, Cencini (2001:117) argues that "[the payment of wages] is the unity of the new output and of its monetary form. When wages are paid, output is converted into money, i.e. it is issued as a sum of money". In the initial stages, transnational money-income would thus be equated to the wage-bill of TNCs. The common world currency could be introduced *de facto* by TNCs in the payment of their wage-bill and would therefore be endogenously determined. The capital accumulation of TNCs would then require a separate institutional proposal (not discussed here) for a new monetary reform consistent with the theoretical distinction between money, income and capital (Schmitt 1984:328).

Other Benefits of a Common World Currency and a Revisited ICU

The previous paragraph has shown that the mission of the proposed world central bank would be to disentangle 'standard' and 'transnational' real emissions by providing a supranational numerical vehicle for the latter. Schmitt (1977:111-2) once suggested that the future world central bank be divided into a monetary and a financial department. The latter would be an international financial institution *per se* supervising financial intermediation between debtor and creditor countries. In my renewed framework, the former would be the first institution responsible for issuing transnational money emissions. Interestingly, to the question "[a]re we, indeed, in a brave new world, where sustained current account deficits, even by the world's largest country, no

longer have significant implications?”, Obstfeld and Rogoff (2001) answered: “in brief, not yet”. This early admission by two eminent international economics specialists sheds light on the benefits of an evolution foreseen three decades ago (Brandt Report 1980):

The reform of the international monetary system should be urgently undertaken by all interested parties building on the large measure of consensus [...] and taking account of current difficulties and dangers. Reform involves improvements in the exchange rate regime, the reserve system, the balance of payments adjustment process, and the overall management of the system, which should permit the participation of the whole international community.

Today, the UNCTAD (2008b) implicitly advocates the stabilizing effects of an ICU:

The undesirable effects of the necessary but painful unwinding of unsustainable debt can be compensated only if the surplus countries reduce their surplus positions [...] and provide policy stimuli to avoid a long recession or even a depression of the global economy.

The UNCTAD (2008b) stresses the links between speculation and global imbalances:

Speculation is resulting in currency overvaluation and huge currency mismatches on the balance sheets of domestic households and companies. They should be aware of the repercussions on their trade balances and of the possible need to devalue their currency.

A common world currency would thus channel speculation on assets denominated in domestic currencies roaming free on international capital markets. The ICU would also become a powerful instrument of global governance to control e-money flows in cross-border transactions (Guttman 1998:433-4; Barnett and Cavanagh, 2003:60).

Political Considerations in the Proposed Transnational Monetary Regime

As argued by Mundell (2003:18):

Currency is a medium of exchange and payment, the way language is a medium of expression and conveyance of information. Just as a common language might be the most efficient means of communication of facts and ideas, so a common unit of account might be the most efficient means of communicating prices.

Political aspects of world monetary reform are absent in the TME. This is most unfortunate for international politics has historically impeded the path toward a common currency set against the backdrop of nationalistic reactions of reluctance and resentment. The feasibility and the institutional stability of a world currency are thus highly contingent on the political structure of the world-system. The key issue is whether the latter is conceived of as a mere collection of independent nation-states catering their own national economies or as a comprehensive and

multidimensional world-system transcending national boundaries wherein nation-states are no longer viewed as strictly separate and independent units. In the former, governments do have an irresistible incentive to create their own monetary form (Mill 1894:176). However in the latter, world-systems research offers a way out of this geopolitical impasse. Although there has been some foreshadowing of an unavoidable Tower of Babel in the background of our hypothetical transnational monetary world, what was once deemed utopian could turn into a much more realistic political breakthrough under the impulse of well-inspired national governments devising a post-crisis world governance scenario by solemnly agreeing not to oppose such a world monetary reform. Our theoretical endeavor would nonetheless be faced with its most serious pitfall for currencies have always been associated with national political sovereignty and made consubstantial to national heritage through customs and habits ever since monarchies have put the faces of kings on coins as claims of loyalty. Major powers will certainly remain reluctant to give up a share of their monetary sovereignty as long as provision for adequate compensation or political power in the larger unit is not satisfactorily guaranteed. In fact, the very existence of hegemonic powers seemingly runs counter to the idea of a world currency (Mundell 2003:4):

Just as Britain did not want the world currency in the nineteenth century because it would infringe on the universality of the pound, so the United States did not accept the world currency at Bretton Woods because it would reduce freedom of action with respect to the dollar.

However, one should not overlook other concerted endeavours aimed at overcoming these obstacles. For instance, following the 1967 Rio de Janeiro annual meeting of the IMF, Special Drawing Rights were close to becoming “the embryo of a global currency” (Mundell 2003). Groundbreakingly, this idea was revived - and thus politically reinforced - by a stunning proposal (Xiaochuan 2009) made by China, Russia, a UN panel and others:

The outbreak of the current crisis and its spillover in the world have confronted us with a long-existing but still unanswered question, i.e., what kind of international reserve currency do we need to secure global financial stability and facilitate world economic growth, which was one of the purposes for establishing the IMF? The above question, however [...] is far from being solved, and has become even more severe due to the inherent weaknesses of the current international monetary system.

The reason for the enduring Dollar hegemony (Liu 2002) in the post-World War II era was essentially the acceptance by the international community of the exorbitant privilege² accrued to the United States by virtue of its role as the key currency. I precisely argue in this paper that the latter situation has become obsolete in the early 21st century world-system while obstacles to a transnational alternative are no longer insurmountable, a configuration that would have been politically impossible before the 2007-2009 crisis broke. Importantly, the present

² This term is often misattributed to De Gaulle but was actually coined by Giscard D’Estaing in February 1965.

proposal of a common world currency would prevent countries from giving up their currencies. In the aftermath of the biggest crisis since the 1930s, the utterly influential People's Bank of China made the following statement (Xiaochuan 2009):

The crisis again calls for creative reform of the existing international monetary system towards an international reserve currency with a stable value, rule-based issuance and manageable supply, so as to achieve the objective of safeguarding global economic and financial stability.

This fundamental issue has probably never been as vivid as today. While the Great Depression was undoubtedly a turning point in twentieth century interstate relations (Arrighi & Silver 1999:121), the current crisis resembles the one that happened in the 1930s and thus ineluctably foretells drastic change in the world-system.

CONCLUSION

I have attempted in this essay to draw on a heterodox monetary framework developed by Bernard Schmitt and identify its subsequent contribution to world-systems research. This has required a thorough reflection on the introduction of a common world currency. The major innovations would be the monetisation of transnational production by a world central bank managed by a consortium of nation-states, and a revisited Keynesian ICU that would harmoniously integrate debtor and creditor countries in the world-economy. The solution sketched out provides a numerical vehicle for transnational production activities and an outward monetary expression for the corresponding global community without undermining the interactive power of States. In our interdependent and globalized world, the monetisation of transnational production within a legitimate world-system has simultaneously become an economic necessity, an institutional challenge, an axiomatic conundrum and a political subject of contention. In times of chaos and radical uncertainty, particular proposals for world monetary reform will likely be the object of skepticism but fortunately, there will continue to be room for open-minded scholarly discussion to accompany the ongoing paradigm shift. Finally, to quote Husserl (1935):

There are some ideals that exist for individuals in their nations, and other ideals for the nations themselves. But, ultimately, there are also infinite ideals for the spreading 'synthesis' of nations, and in that synthesis each of these nations gives its best to its partner nations precisely by aiming for its own ideal task in a universal spirit.

At stake is nothing less than the testing of the strength and persuasiveness of world leaders to replace the failed neoliberal experiment by a more viable world-system.

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