

**ELECTRONIC PARALLEL PAYMENT SYSTEMS WITH SOVEREIGN  
CURRENCY; A PROPOSAL**  
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**I. An Electronic System of Mutual and Joint State/Private  
Accounts with a Debit Payment Card**

This system was first proposed by me in January 2010 as a reaction to the funding debt crisis of the state of Greece. It was analyzed in a preparation study, Facebook NOTES and TV lectures during 2010. This system involves the creation of electronic mutual accounts that each is jointly owned by the state and a specific economic unit for all economic units in the economy. This system could be based on the current state revenue mechanism that operates with debit accounts of economic units that owe taxes and other payment obligations to state institutions and these accounts could be converted to act as both debit and credit accounts through which the state can make payments that cover its spending, income transfers and service debt obligations. In this proposal the Treasury has the sovereign right to issue/credit electronic currency units to these mutual/joint purpose accounts. The proposed payments system operates external and independently (although coordinated) from the central bank and interbank operating system that could exclusively specialize in extending credit and offering deposits that are used as a store of value and engaged to clear and settle private based transactions. However, as exists currently, the mutual accounts payment system will be linked to the central bank and private interbank system so

that transfer payments could be made between private deposit accounts and the state/private mutual accounts payment mechanism.

These mutual accounts, denominated in the sovereign currency, are credited by remittances of the state such as tax refunds/rebates, state salaries, social compensation payments, state payments of purchases, other income transfers, subsidies, debt service costs, debt principal repayment, etc., to the units co-owning the accounts with the state. They are debited by tax obligations and other fees payable to the state. Each account entitles the private co-owner to transfer net balances to other mutual and bank deposit accounts or use an issued debit/credit/tax card that could be used for the settlement of transactions. Each mutual account at any particular time unit is either balanced meaning that what is owed to the state equals what the state owes to the private economic unit; or imbalanced as debit account meaning that the private unit owes an amount of the currency to the state or credit account meaning that the state owes an amount of the currency to the economic unit.

These net imbalances that are denominated in the currency represent legal tender to settle private transactions, meaning that a private unit with a credit (surplus) account could transfer funds or use its debit/credit card to purchase and pay products/services purchased from private units with debit (deficit) accounts. Furthermore, all private trade transactions regardless of how they are payed must require the use of this debit/credit card as payment recording device so the card also acts as a tax card that avoids tax evasion (i.e., VAT tax). In this way trade and liquidity are facilitated and national income is enhanced. Notice that

mutual account owners (private units) could transfer funds between mutual accounts and bank deposit accounts depending on specific transaction arrangements, extent of state obligations and relative interest earning opportunities of these competing (state/private) account balances and their respective service costs. For example, labor income payments of corporations that receive state funds could be made to bank deposits although these deposits will be net of current and forward tax obligations and employees could still prefer payment via their respective mutual accounts.

The remaining balance of a mutual account pays an interest if debit balance to the state and if credit balance to the private unit but the state also charges a small seigniorage tax rate for the privilege to utilize the account. At the end of a period, accounts are settled with system funds issued and transferred from the state and the private units respectively. Furthermore, the balances of these accounts could be extended overdraft facilities that represent credit to be used for further purchases subject to forward tax obligations expected from higher income flows generated by the added credit based transactions. Notice that utilizing such a system the state is capable to provide a net fiscal spending stimulus directly to the economy that is transmitted without involvement of the central bank and private financial operations of the banking system with minimum transaction and debt service cost.

This system assists the acceptance of the new sovereign currency which is the legal tender and settlement basis of these accounts and avoids conversion of mutual obligations in another currency strengthening its

acceptance criteria. Fiscal policy is funded immediately and at a minimum transaction and service cost. Furthermore, it raises the velocity of existing public money issued and enhances liquidity and trade engagement of economic transactions in this currency.

The extension of liquidity via the cycle of spending/taxing payment system and the private trading of mutual account imbalances avoids some of the adverse effects from the traditional monetary policy facilitation via the private banking system and financial markets.

First, this payments mechanism enables the funding of transactions without resort to private finance and this reduces the secondary fiscal balance required to repay debt service, while it eliminates the need for a primary fiscal surplus. Second, fiscal policy is no longer limited by the preferences of private financial markets that could "discipline" with a sudden stop of fiscal financing causing a destructive consolidation program (austerity). Third, it reduces the pressure upon interest rates and thus makes credit to private economic units less costly and limits any "crowding out" effect. Fourth, the circulating funds do not need to be deposited with banks and could be used directly to pay spending obligations as well as pay taxes without delay.

Fifth, tax evasion is discouraged because all payments to state employees, suppliers, investment projects, income transfer recipients and debt service/repayment obligations are recorded and then spent directly out of the mutual accounts, deducting VAT and income taxes

from these accounts. Sixth, the reduction of interest rates creates a positive wealth effect that induces more spending. Seventh, the conduct of monetary operations to support the liquidity of the banking sector is decoupled from fiscal policy requirements since banks are no longer required or able to accumulate state debt and their ability to extend private credit is only limited by the availability direct capital adequacy sources and not on state debt accommodation. This tends to avoid the opportunities for speculative debt and financial instability.

Eighth, there is no opportunity to expect a 'Ricardian Equivalence' effect as future taxes are no longer necessary to be discounted by private economic units and this enhances current domestic spending and the value and impact of the fiscal multiplier recursive operations upon domestic economic activity. Ninth, any fiscal stimulus effect and its liquidity transmission of payments are a closed system; and at the effective stasis for the economy the net tax/savings revenues in the mutual accounts are equalized with the fiscal spending stimulus! Payments are internalized among state and private transactions without any external leakages as they are cleared and settled with fund transfers among mutual accounts and without any drain of monetary balances to be shifted across and held as deposits with the private banking system. Notice that the degree of internalization and the extent of leakages to the private banking sector are subject to payment arrangements, private obligations to the state, the service cost and earning differential between bank deposits and the state system of mutual accounts.

Tenth, this internalization of fiscal spending and its endogenously generated private transactions avoids external leakages required to settle foreign spending. It induces and enables the substitution of purchases towards domestic goods and away from foreign goods and to the extent that it reduces the marginal propensity to import, it enhances indirectly the value and impact of the fiscal multiplier upon domestic economic activity. Furthermore, it improves the balance of current accounts and external payments and appreciates the exchange rate of the domestic currency.

Eleventh, the reduction of interest rates tends to reduce the marginal propensity to save and it enhances indirectly the value and impact of the fiscal multiplier upon domestic economic activity. Twelfth, the reduction in interest rates, the appreciation of the exchange rate and the limits upon the expansion of private financial credit tend to reduce inflationary pressures. Finally, thirteenth, the service cost and interest earning capacity of the mutual accounts will represent competition for bank deposit accounts and induce an increase of interest rates paid to savings accounts held by private economic units.

Two issues that remain to be settled is 1) the liquidity control of this payments system in order to avoid inflationary costs and 2) the coordination of liquidity generation with the monetary operations of the Central Bank. It is proposed that fiscal policy that operates the mechanism of this system is conducted to incorporate a reaction process

to cyclical and secular disturbances. One such method is to employ its automatic instruments of spending and income transfers countercyclically and reacts inversely in response to nominal income gap positions. In the event that these disturbances persist and the nominal income gap remains positive (demand conditions beyond productive capacity and full employment output) tax rates are to change procyclically to reduce disposal income and private spending while tax collection organization seeks to limit tax avoidance and evasion. Public spending is moderated by control instruments of organization in order to reduce wasteful spending and fraudulent activities.

The coordination with the monetary authorities is an issue that requires the cooperation of both fiscal and monetary authorities. Both authorities could incorporate a common strategy mechanism although their tactics are different. The fiscal authority could utilize automatically and voluntarily the instruments of spending and tax parameters while the monetary authority will conduct “open market”, refinancing swap and “quantitative easing” operations seeking to affect policy interest rates. However, the target reaction could be based on the nominal income gap position of the economy. However, the nominal income gap targeted by each will differ as based on the estimated effective nominal income impact from the conduct of their respective policies. For example, the monetary authority could estimate the effective nominal income that corresponds to the level of private credit extension of the financial system and its deviation from full employment potential income and attempt to control excessive private credit creation with

policy rate adjustments. On the other hand, the fiscal authority could estimate the effective employment of resources required by fiscal spending on public purpose projects and the nominal income they generate and any “crowding out” could impose upon the current private employment of resources, effective demand and corresponding nominal income associated with full employment of nominal output; then it could adjust spending and tax parameters to limit such interference.

## **II. An Electronic System of Multilateral Barter Transactions with an Endogenous Generation of Trade Credit**

This is an electronic system of multilateral cycles of barter transactions of small and medium size enterprises that encounter liquidity, credit rationing and inventory problems that were significant during the liquidity fragmentation and asphyxiation present during the common currency area, currency board, and fixed exchange rate and commodity standards regimes. However, these problems remain and could be substantial and intensified in the presence of a sovereign currency regime. The proposed electronic system creates either virtual and customer based transaction cycles which are closed and cleared by matching a series of bilateral transactions that are a combination of generated vertical/production conversions of product inputs and allocated horizontal/market substitutions of product outputs. The system is capable to clear mismatches with suggested price/quantity adjustments and settle remainder gaps with internally generated trade credit subject to the credit rating of participating units. The system schedules distribution allocation based on transportation opportunities

subject to minimum delivery cost. This system facilitates production, trade and distribution transactions utilizing unused and misallocated inventories from market inefficiencies and liquidity constraints of the sovereign currency in order to reduce the bottlenecks from financial fragmentation and credit worthiness limits of loan extension. The utilization of this system enhances commercial trade activity, production expansion and eases problems of transmission of the sovereign currency as its application is based on alternative complementary barter transactions.