Vietnam in the 1980s: Price Reforms and Stabilization

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1. Introduction

Prior to the 1980s, Vietnam followed the Soviet economic model closely. The characteristics of the Vietnamese economy were essentially those of a traditional centrally-planned economy (CPE), namely, state ownership of means of production; government administered physical input, output, and prices; a single government bank and a passive financial system; a relatively isolated economy with heavy reliance on trade within the former trade block of socialist countries, the Council of Mutual Economic Assistance (CMEA); and a heavy industry orientation in investments. The Vietnamese economy suffered from persistent shortages with low levels of per capita consumption and inefficiency of investments. By the end of the 1970s, industrial production had stagnated, food production had fallen to very low levels, forcing Vietnam to import large amounts of rice, and the balance of payments position worsened. The failure of the centrally planned system had become apparent and pressures for reform increased substantially.

The period 1980-88 saw a kind of "modified" planned economy (MPE). Some partial reforms were undertaken within the framework of a CPE. In 1981, the government tried to create incentives in the agricultural sector through the contract system which permitted households to sell certain proportions of their produce at "free"

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market prices. At the same time, the so-called Three-Point-Plan system was introduced in the state-owned enterprise (SOE) sector. Under this system, enterprises were required, as before, to produce the planned output for the state, using state supplied inputs (Plan A). In addition, they were permitted to produce for the state any above-plan output resulting from inputs procured by the enterprises themselves (Plan B). Furthermore, any unplanned "minor" output by the enterprises was permitted to be sold in the "free" market (Plan C). Market forces were enhanced under plans B and C, resulting in greater decentralized decision making, the dual price system, and the strengthening of the parallel economy.

On the other hand, there were no significant changes in macroeconomic management, particularly in the relationships amongst the state budget, the central bank and the SOE sector. Attempts to liberalise the economy in 1985 (the so called "price-salary-money reform" which de-controlled prices charged by the state-owned enterprises as well as abolishing state subsidies on consumption goods' prices) faced severe stabilization problems: annual inflation accelerated to several hundred per cent, output growth slowed, and external arrears rose to high levels.

In the spring of 1989, Vietnam adopted a comprehensive reform package aimed at stabilizing the economy, removing inefficient administrative control, enhancing freedom of choice for economic units and introducing competition so as to change fundamentally the economic management system. The reform measures included almost complete price liberalization, large devaluation and unification of the exchange rate, increases in interest rates to positive levels in real terms, substantial reduction in subsidies to the SOE sector, encouragement of the private sector and a return to family farming on the basis of long-term leases.[1]

From 1990 to date, further steps towards a market economy have been undertaken. These include fiscal and banking reform, SOE restructuring and privatization, changes in labour market regulations and reductions in quotas and tariffs. The process of economic renovation in Vietnam has been characterized by a gradual process of "learning by doing". Even the relatively large leap taken in 1989 was

[1] Prior to 1989, the official exchange rate was fixed at 900 dong per US$ while the "black market" rate was considerably higher. Unification of the exchnge rate at 4500 dong per US$ in fact meant a fivefold official devaluation of the dong.

underpinned by a series of initiatives throughout the decade that created the basic conditions for transformation into a market economy (Le Dang Doanh 1994). So far, the economic reforms in Vietnam can be considered successful compared to many other reforming CPEs (see Table 1). At present, the country seems to be progressing towards financial stability and sustained growth.

This paper focuses on the reasons for the apparent failure of the 1985 measures and the success of the 1989 reforms. As can be seen from Table 1, inflation rates declined while real GDP growth was maintained throughout 1989 to 1994. Van Brabant (1990), Wood (1989) and Kolodko *et al.* (1992) have compared the outcomes of the two sets of reforms without focussing on the reasons behind the difference in outcomes. In filling in this gap, this paper aims to provide a better understanding of the process of gradual reform in CPEs more generally.

TABLE 1

COUNTRIES IN TRANSITION: REAL GDP AND CONSUMER PRICES
(% change p.a.) *

	Real GDP						Consumer Prices					
Country	89	90	91	92	93	94	89	90	91	92	93	94
Vietnam	8.0	5.1	6.0	8.6	8.1	8.5	35	68	68	18	5	9
Belarus	...	...	–1.2	–9.6	–11.6	–17.1	...	...	84	969	1188	1621
Bulgaria	...	–9.1	–11.7	–5.7	–4.2	–2.0	...	24	334	82	73	81
Hungary	...	–3.5	–9.9	–5.1	–2.0	1.0	...	29	34	23	22	19
Poland	...	–11.6	–7.6	2.6	3.8	4.5	...	586	70	43	35	30
Romania	...	–7.4	–15.1	–13.5	–	–	...	5	161	210	256	156
Yugoslavia	...	–7.5	–17.0	–34	–	...	...	583	117	6147	...	...
Ukraine	...	...	–11.9	–17.0	–14.2	–25.0	...	...	91	1210	4735	1000
Russia	...	...	–13.0	–19.0	–12.0	–12.0	...	...	93	1353	915	336
Kazakhistan	....	...	–13.0	–14.0	–12.0	–6.0	...	...	91	1381	1571	1680
Mongolia	...	–2.0	–9.9	–7.6	–1.3	2.5	...	–	209	321	183	84

* Data for 1994 are projections. For Vietnam, inflation is measured by the end of period. The first year with the number signifies the start of major market-oriented reforms. Inflation rates for Vietnam as from 1984 are shown in Table 6 below.

Sources: IMF (1994, p. 66); World Bank (1994a, p. 4); *Vietnam Business Journal*, volume II no. 4, Sept./Oct. 1994, p. 33.

2. Theoretical considerations

2.1. *The financial system and money supply process in a pre-reform environment*

The first steps in reforming the banking system in Vietnam were taken in mid-1988 with the transfer of commercial banking functions from the State Bank to four "specialized" banks. Only in May 1990 were two decree laws enacted, setting the basis for a market-oriented banking system. Prior to 1989 therefore, the financial system was, at least in structure, typical for a centrally planned economy.

The distinguishing characteristics of such a financial system are well documented and can be summarized as follows:

– a banking system consisting only of the government state bank with no independent commercial banks (the so-called "monolithic" banking system);

– the totally accommodating or "passive" role of the state bank with regard to state-owned enterprises. This means that the state-owned enterprises were given credit at zero or very low interest rates in order to purchase raw materials and inventories to fulfil the planned production stipulated by the state. On the other hand, deposits with the state bank on the part of the state-owned enterprises could not be used by the enterprises without specific direction from the planners. This represents the so-called "enterprise circuit" of the money supply process, and is associated with a "credit plan". Credit is supposed to grow at the same rate as output, and is therefore presumed to have no inflationary effects;[2]

– the households in a classical centrally planned economy dealt only in cash. They were paid by enterprises in cash, and transacted amongst themselves using cash. This is the so-called "household circuit" of the money supply process, and is associated with a "cash plan". Operationally, the cash plan quantifies factors that result in injections and withdrawals of currency. For example, wages and salaries, purchases of agricultural produce from households by enterprises, and government transfers to households represent injections. The sale of consumer goods and services to households as well as the net deposits of households in the state bank (a very minor item in reality) represent withdrawals. The aim is to keep a balance between cash injections and withdrawals. Once the prices and quantities of consumer goods and services are determined under the physical plan, the cash plan sets the target for currency in circulation which is implemented by the state bank.[3]

Given the formulation of the credit plan and cash plan in the light of the physical input and output plans, interest rates had virtually no role in allocating financial resources. Furthermore, planned output was usually set at high levels, reflecting over ambitious growth targets. Since output growth in general, and plan fulfilment in particular, were the prime criteria against which enterprise performance was evaluated, the easy credit from the state bank at virtually zero interest rate meant that there was strong incentive for enterprises to borrow from the state bank in order to pay for more materials and labour inputs than currently needed so as to ensure their availability for future output growth. There was then a tendency for the easy credit in the "enterprise circuit" to leak into the "household circuit" via increased purchase of labour and inputs from households.

Since most households did not keep accounts at the state bank (either through non-availability of this facility generally or through lack of interest rate incentives), there was no mechanism for any

[2] The balance sheet of the state bank can be represented by the following identity: $\Delta CU = \Delta NDC_g + \Delta NDC_e + \Delta R - \Delta DH$. That is, the change in the money supply (CU) is equal to the change in the net domestic credit of the government (NDC_g), plus the change in the net domestic credit of enterprises (NDC_e), plus the change in international reserves (R), less the change in net household deposits at the state bank (DH). It is clear that money supply in a CPE can be directly influenced by increases in credit given to the government and the state-owned enterprises. These increases can then be transmitted to the household sector via increased purchases of agricultural goods and of labour supply.

[3] The cash plan can be represented by the following identity: $\Delta CU = F + WN + T - PQ - \Delta DH$. It states that the change in the money supply (that is, the change in currency in circulation CU) equals the value of enterprises' purchases of agricultural goods from the household sector (F) plus the total wage bill paid to households (WN) plus government transfers to households (T) less the value of consumer goods purchased by households (PQ) less the change in net household deposits at the state bank (DH). The assumption is that all currency is held by households. When households pay cash for consumer goods, enterprises deposit it in their accounts at the state bank. The use of these accounts are blocked. It will be argued in Section 4 below that as a result of the Three-Point-Plan introduced for SOEs in Vietnam in 1981, SOEs in fact held large quantities of cash.

excess liquidity from the household circuit to be re-channelled to the enterprises. Furthermore, because of the heavy industry orientation of most centrally planned economies, consumer goods were generally in short supply so that it was virtually impossible to keep the cash withdrawals from the household circuit balanced with the cash injections into that circuit. This resulted in "forced" money holdings on the part of the households, with the accumulation of these holdings giving rise to a "monetary overhang". The manifestation of this overhang of money stock is the physical shortages observed in centrally planned economies, with prices regulated to avoid outbreaks of inflation; that is, a situation of "repressed" inflation.[4]

2.2. *Implications for reform and price liberalization*

It is clear from the above discussion that the monetary overhang is a "stock" problem that is brought about by the "flow" of net domestic credit extended to the government and state owned enterprises sector. Therefore, even if the flow of credit to the public sector were to be terminated at the beginning of the reform process, there would still be the problem of the stock of excess money. The latter could be eliminated in one or more of the following ways:

– Complete de-control of prices so that inflation becomes open rather than repressed. The resultant open inflation would eliminate the excess money holdings. However, total price liberalization could mean temporary reductions in aggregate supply as some inefficient state-owned enterprises collapsed because of higher input costs and because of changes in demand patterns. This would temporarily exacerbate the inflationary problem, adding to political pressures towards re-controlling prices.

– Sale of financial assets by the government to the household sector and then sterilizing the proceeds (that is, not spending the proceeds or giving central bank credit on the basis of the proceeds). This method, however, entails high interest costs to a government that is already lacking in finance because of the typically under-

[4] It is important to note that the above model of a classical CPE assumes the non-existence of parallel markets. It will be argued in Section 3 below that the growth of such markets as a result of the 1981 reforms in Vietnam significantly alters the conclusions relating to monetary overhang.

developed nature of the taxation system in centrally planned economies.

– Sale of non-financial assets such as land, houses or enterprises. This is usually a lengthy process because of the lack of legal and other infrastructure.

– Confiscatory monetary reforms such as a forced conversion to a new currency at rates that are unfavourable to existing money holders, or a blocking of existing bank accounts. The net effect on financial asset holdings is the same as open inflation. However, governments appear to think that confiscatory monetary reforms are easier to "sell" to the public on income distibution grounds than open inflation. Hence, this has usually been the preferred option in dealing with the problem of monetary overhang. As will be seen in Section 4 below, this method was also used in Vietnam with adverse consequences.

3. Empirical findings

3.1. *Monetary overhang in Vietnam during the 1980s?*

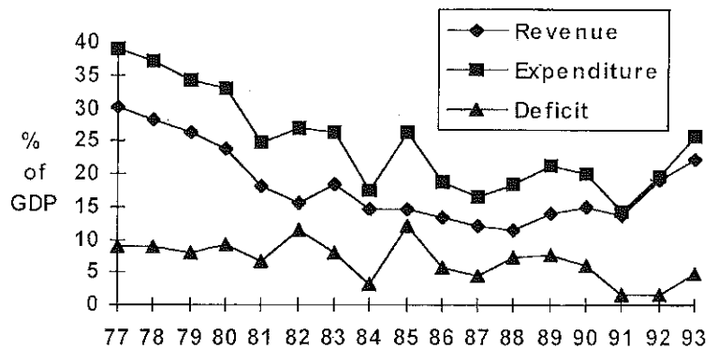
Vietnam's budget deficit was in the range of 7 to 9% of GDP between 1977 and 1981, rising to 12% in 1985, and remained at around 7 to 8% in 1988-89 (see Chart 1 below). Revenue had been falling continuously from 1977 to 1989, and expenditure, although constrained to some extent by the falling revenue, remained significantly above revenue until 1991. The resulting deficit was financed largely (two-thirds) through foreign assistance from the former Soviet bloc countries (CMEA) until 1984. From then on, about 60% of the budget deficit was financed through borrowings from the central bank.

As a result, domestic credit expansion, already at a rapid rate, accelerated in 1984 and rose to a peak of 430% in 1986. The rate remained high for the remainder of the decade (248% in 1987 and 395% in 1988, see Chart 2). The credit expansion appears to have fed into the household circuit since the increases in currency in circulation correlated almost perfectly with increases in domestic credit;

the correlation coefficients for the periods 1978-88 and 1978-93 were 0.99 and 0.98 respectively.

CHART 1

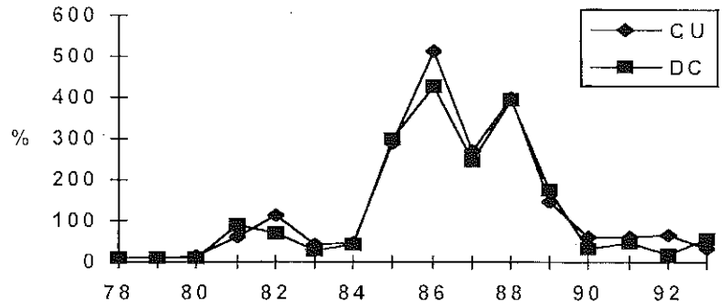
GOVERNMENT BUDGET STRUCTURE
(% of GDP)



Sources: For 1977-83, the estimation is based on Kimura (1989, Tables 1-1 p. 9 and 1-11, p. 24) and GSO (1991, Table 12, p. 18); for 1984-85, World Bank (1992, Table 5.1, p. 141); for 1986-93, World Bank (1994b, Table 5.1, p. 118).

CHART 2

CASH IN CIRCULATION AND DOMESTIC CREDIT
(December-December basis change from previous year)

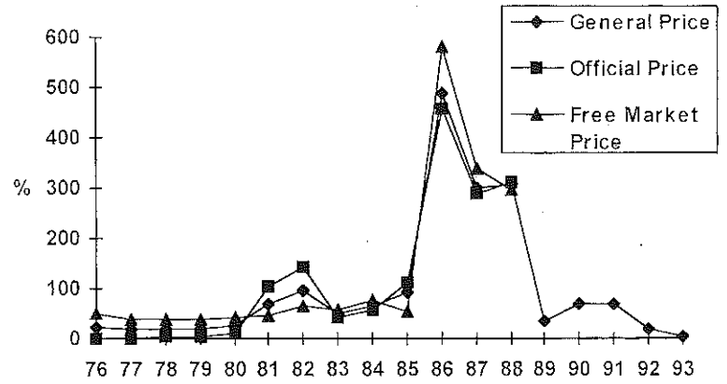


Note: CU-Currency in circulation; DC-Domestic credit.

Sources: For 1977-85, the estimation is based on the IMF data taken from Fford and Vylder (1988, Tables 6.3, p. 135 and 6.5, p. 139) and IMF (1983, Table 11, p. 27); for 1986-88, World Bank (1994b, Table 4.1, p. 117); for 1989-93, World Bank (1994a, Table 1, p. 92). The 1985 data are adjusted for consistency between IMF and World Bank datasets.

CHART 3

RETAIL PRICE
(December-December basis change from previous year)



Note: with the price reform in 1989, there is no longer any distinction between official and free market prices.

Sources: For 1976-88, World Bank (1992, Table 6.1, p. 146); for 1989-93, World Bank (1994a, Table 2.1, p. 4).

Shortages in consumer goods from the heavy industry orientation development strategy became exacerbated by the rapid increases in currency in circulation. Food shortages were particularly acute. Food imports which had totalled one million tons for the five years 1981-85, rose to one million tons per year in 1986 and 1987 (Tran Trong Kim *et al.* 1991, and Fford and Vylder 1988). This was the case in spite of the "contract system" which created incentives for agricultural production.

Planned output for other essential goods had been scaled down in the course of the 1980s while production from the state owned enterprises had increased as a result of reforms in that sector (the Three-Point plan, see Table 2). It would seem then that shortages of other essential goods might have eased. However, it was estimated that secondary market prices for some essential goods exceeded official prices by five to ten times (Fford and Vylder 1988).

It would appear therefore that the Vietnamese economy during the 1980s would be characterized rather well by the theoretical model of monetary overhang and repressed inflation outlined in Section 2 above. Indeed, Kolodko *et al.* (1992) believed that the economy exhibited both open inflation and severe shortages from 1981 while Van Brabant (1990) claimed that the monetary overhang in existence was effectively reduced by the 1985 reforms.

However, the very significant size of the parallel market in Vietnam (estimated at between 44 and 60% of total retail sales in 1976-84, and between 24 and 34% of total retail sales in 1985-87) and the open inflation, particularly in 1985-88, suggest that the problem of monetary overhang in the 1980s could have been quite minor. In order to test this proposition, the demand for money as well as its velocity of circulation were examined.

TABLE 2

ECONOMIC PLANS AND PERFORMANCE, 1980 AND 1985

Industry	1980 plan (1)	1980 actual (2)	(2)/(1) %	1985 plan (3)	1985 actual (4)	(4)/(3) %
Foodgrain mill.tons	21.0	14.4	68	19-20	18.2	94
Sea fish mill.tons	1.0	0.38	38	0.47-0.5	0.57	119
Pigs mill. heads	16.5	10.0	61	13	11.8	91
Electricity bn. kWh	5.0	3.7	74	5.5-6	5.2	89
Cement mill.tons	2.0	0.6	30	2.0	1.4	65
Fertiliser mill.tons	1.3	0.31	23	0.35-0.4	0.52	114
Cloth mill. metres [2]	450.0	175.3	39	380-400	367.1	96
Paper '000 tons	130.0	46.8	36	90-100	69.5	77

Source: Beresford (1989, p. 190).

If the money market was in equilibrium, there is a presumption that monetary overhang was not a significant problem. To test this therefore, a money market equation of the form:

$$m_t^* = \alpha_0 + \alpha_1 y_t + \alpha_2 z_t + u_t$$

was estimated using annual data.[5]

The results of the estimation for the three monetary aggregates are given in Table 3. The three monetary aggregates are: narrow money (M1), defined as currency in circulation plus household deposits; currency in circulation (CU); and household deposits (HD).

Given the relatively small number of observations (12), the estimations seem to be acceptable, with fairly stable statistical behaviour, particularly for M1. Money demand therefore appeared to be stable and the money market seemed to have been in equilibrium. However, all monetary aggregates responded much more strongly to the income variable than to the opportunity cost variable. Particularly in the case of demand for real M1 and CU, the high income elasticity could reflect the following:

– there was a process of rapid monetization of the economy as increasingly more goods and services were sold in parallel markets as a result of the reforms that took place in the early 1980s. At the same time, the ratio of money holdings to income was very low. The ratios of M1 to GDP during 1981-88 were below 10%. The ratio of M2 to GDP was also low by international standards prior to 1989 (see Table 4). Hence, it could be expected that money demand would increase more rapidly than increases in income for transactions purposes;

[5] m_t^* represents the log of desired real money stock; y_t is the log of a scale variable; and z_t is an opportunity cost variable. Real national income and the inflation rate (as measured by changes in free market prices) respectively were chosen to proxy the scale and the opportunity cost of holding money. Because of the use of the relatively small number of annual data, the estimation was done using the partial adjustment model (PAM) instead of the more general error correction model (ECM).

TABLE 3

THE PARTIAL ADJUSTMENT MODEL (PAM) ESTIMATES OF DEMAND FOR MONEY

Model Sample	I (HD) 1978-91	II (CU) 1977-91	III (M1) 1978-91
Constant	–9.906 (–2.286)*	–8.071 (–2.458)**	–8.942 (–2.649)**
D	0.498 (1.552)	0.499 (3.113)**	0.464 (2.632)**
NI	1.791 (2.258)*	1.404 (2.550)**	1.599 (2.632)**
Π	–0.817E-3 (–0.879)	–0.867E-4 (–0.481)	–0.334E-3 (–0.767)
Lagged dependent variable	0.723 (3.327)**	0.668 (3.623)***	0.649 (3.418)***
R-Squared	0.82	0.94	0.91
R-Bar-Squared	0.73	0.89	0.87
Diagnostic tests:			
Autocorrelation χ^2 (1)	0.119	–	2.274
Functional form χ^2 (1)	2.956*	–	2.356
Normality χ^2 (2)	0.694	–	0.982
Heteroscedasticity χ^2 (1)	1.144	–	1.356

*, **, *** significant at 10, 5 and 1% level respectively. The estimation using the general price indexes gives no significant changes (the correlation between the inflation rate as measured by general prices and free market prices is 0.99 during 1976-88).

D = dummy variable for the years 1981, 1985 and 1989 when price and other significant reforms took place.

NI = log of real national income.

π = inflation rate used as a proxy for the opportunity cost of holding money.

(1) and (2) refer to the number of degrees of freedom in the estimation.

– the high income elasticity and the low inflation rate elasticity of money demand, together with the significance of the dummy variables inserted at the dates of major reforms, could indicate that people were able to adjust the level of their real balances to changes in government policies during the 1980s.

The above points seem to support the argument that there was no significant monetary overhang in Vietnam during the period under study. However, the very high income elasticity of money demand is also consistent with the hypothesis that households were forced to hold money as their incomes rose. Another test in addition to estimating money demand functions would therefore seem desirable.

According to the identity, $V \equiv PY/M$ (where V represents the velocity of circulation of money, P the price level, Y real income, and M the money stock), if there was a substantial increase in money supply relative to increases in output and if prices were regulated, then the velocity of circulation of money would decline. There was, however, no evidence of a long term decline in the velocity of circulation of money in Vietnam (see Table 5). Velocity rose during 1981-84, declined in 1985-86, and rose again in 1987-88.

TABLE 4

RATIOS OF MONETARY AGGREGATES TO GDP (%)

	78-80	82	83	84	85	86	87	88	89	90	91	92
M1/GDP	≈ 14	8.4	9.2	8.3	7.9	9.9	7.8	9.2	15.2	16.4	13.5	–
HD/GDP	≈5.3	2.1	2.2	1.6	1.1	1.3	1.2	1.5	5.3	5.6	4.0	–
M2/GDP	–	–	–	–	–	17	15	19	31	30	29	27

Sources: for M1(=CU+HD), GDP is as indicated in Charts 1, 2 and 4; M2/GDP are taken from World Bank (1993, Table 4.1, p. 242 and 1994a, Table 6, p. 98).

TABLE 5

VELOCITY OF MONEY

	78	79	80	81	82	83	84	85	86	87	88	89
NI/CU	8.1	8.2	8.5	12.1	12.4	11.6	12.3	8.4	7.2	9.3	9.5	6.9
NI/M1	5.1	5.1	5.3	8.5	9.3	8.8	9.8	7.3	6.2	7.9	8.0	4.5

Note: the same results can be seen with the calculation of GDP/CU or GDP/NI (in the case of Vietnam GDP is calculated with the *ad hoc* assumption of the proportions between NI and GDP).
Sources: As indicated in Chart 4.

Turn finally to household deposits (HD) where the money demand estimates show the highest income elasticity and a very low response to the opportunity cost of holding money. This would, *a priori*, indicate "forced" money holdings. On the other hand, real interest rates were negative during 1982-88 period, and people seemed to have responded to that by reducing their deposits at banks (see Table 4). This would indicate a certain degree of choice in portfolio holdings. Also, as argued above, it is to be expected that the transactions motive would be strong at the very low levels of income in Vietnam at that time.

On balance, the empirical case for the existence of substantial monetary overhang and repressed inflation in Vietnam during the 1980s is not convincing.

4. The failure of the 1985 reforms

A gradual "stop-go" reform process characterized much of the 1980s in Vietnam. In the late 1970s and early 1980s, microeconomic reforms in the agricultural and SOE sectors, the devaluation of the dong (from 2.8 "old" dong to 9.1 "new" dong to the dollar), and the attempted increases in wages and salaries had resulted in open inflation (see Chart 3). Consequently, there were attempts in 1983 and 1984 to reverse the liberalization process and to revert to stricter controls and planning.

The 1985 reforms were significant in that they represented a genuine effort to abolish the state subsidies on consumption goods prices, to de-control prices charged by SOEs, and at the same time, to stabilize the economy. This set of reforms therefore involved prices, wages, and money.

On the prices front, the SOEs were given greater autonomy in the setting of their prices. They were also permitted to borrow from the state bank instead of relying on state budget support. In particular, state subsidies for consumer goods prices were withdrawn. As a result, consumption goods prices rose rapidly. In order to maintain the level of real wages and transfers, nominal minimum wages and transfers were increased. Higher wages were also expected to increase labour productivity.

In attempting to stabilize the economy, the authorities engaged in substantial monetary reforms. Early 1985 saw a massive devaluation of the (old) dong against the US dollar, from about 12 to 100 dong to the dollar. However, the exchange rate in the parallel market at that time had already seen the dong depreciate to 350-370 per US dollar (Kimura 1989). Believing in the existence of a very large monetary overhang in the form of currency in circulation, and attempting to control inflation so as to avoid a further drop in real wages as well as a collapse of the exchange rate, the government implemented a kind of confiscatory monetary reform in September 1985. The new dong replaced the old dong at the rate of one to ten.

The main aim of this measure was to penalize the traders in the parallel market. In reality, the impact on holders of private wealth in the parallel market was severly blunted as the two weeks' advance notice allowed the marketeers to get rid of the old dong and hoard gold and foreign currencies instead. On the other hand, this measure destroyed the dong assets of the SOEs. The latter held cash extensively for the purchase of scarce inputs from parallel markets (Jeffries 1993). As a result, the government had to continue its subsidies to the SOEs in order to compensate for the unforseen impact of the confiscatory monetary reform. Subsidies as percentage of GDP remained high (see Table 6). As well, capital expenditures rose sharply to fulfil the five-year plan (1981-85), and the budget deficit peaked in 1985 at 12% of GDP. Two-thirds of the deficit was financed through borrowings from the state bank, resulting in increases in domestic credit of about 300% in 1985 and 429% in 1986.

The drop in real wages due to the high inflation forced the government to return to the rationing system as from 1986, and state subsidies rose again to substantial levels in 1987 and 1988 (see Table 6). At the same time, the reforms to the SOEs already introduced meant that they had access to state bank financing, while the increases in wages and in the prices of inputs provided arguments for the SOEs to take advantage of this "soft" funding.

The predictable outcome of the budget deficits and the SOE situation was a rapid increase in domestic credit and soaring inflation to unprecedented levels during 1985-88 (see Table 6 and Charts 2 and 3). The rampant inflation not only destroyed financial wealth again, but also undermined real wages, the exchange rate, and the effectiveness of the public sector. It also destroyed the effectiveness

of the contract system in agriculture. Food production stagnated, contributing further to inflation.

TABLE 6

BUDGET (% OF GDP), DOMESTIC CREDITS AND INFLATION
(annual % change)

	84	85	86	87	88	89	90	91	92	93[a]
Revenue	14.5	14.5	13.2	12.2	11.3	14.0	14.9	13.7	19.0	22.3
– SOE transfers	10.5	11.2	9.5	9.2	7.2	8.1	8.8	8.2	10.2	11.8
– Tax revenue	3.1	2.3	2.9	2.2	2.9	3.9	4.1	3.7	5.0	8.0
Curr. exp. (exc. int.)	13.5	18.0	12.9	12.7	14.0	15.6	14.9	11.5	14.0	18.8
– Wages & salaries	0.5	1.3	0.9	1.0	1.7	4.6	3.7	2.1	..	..
– Subsidies	5.2	4.7	2.9	4.9	5.3	0.0	0.0	0.0	..	..
Capital exp.	4.1	8.2	5.9	3.9	4.4	5.8	5.2	2.8	5.8	7.0
– Primary deficit	–3.1	–11.8	–5.7	–4.3	–7.0	–7.3	–5.2	–0.7	–0.8	–3.5
– Interest	0.2	0.2	0.2	0.1	0.2	0.2	0.8	0.9	0.9	1.2
Overall deficit	–3.3	–12.0	–5.8	–4.4	–7.2	–7.6	–5.9	–1.5	–1.7	–4.8
Financing	3.3	12.0	5.8	4.4	7.2[b]	7.6	5.9	1.5	1.7	4.8
– Foreign	2.3	4.9	2.2	1.4	2.4	1.5	3.1	1.0	2.4	1.4
– State bank	0.6	7.1	3.6	2.9	2.9	6.9	2.0	0.9	–2.0	1.5
– Gov. securities	0.3	0.0	0.0	0.1	0.1	–0.8	0.8	–0.4	1.3	1.9
Domestic credit	41	301	429	248	395	175	34	47	20	59
– Government (net)	..	..	..	321	736	370	26	4	–54	107
– SOE sector	..	..	..	221	355	111	43	78	36	25
– Other & private[c]	..	..	..	347	235	95	21	68	174	180
Inflation	65	92	487	301	308	35	68	68	18	5

[a] Preliminary estimation;
[b] arrears = 1.7;
[c] before 1992 most credits had gone to the cooperative sector.

Sources: For budget structure, World Bank (1994b, Table 5.1, p. 118 and 1992, Table 5.1, p. 141); for domestic credit and inflation, see Charts 2 and 3.

The severe consequences of the 1985 reform stemmed from the failure to stabilize the economy. The government failed to deal with the flow problem – the public deficits – while it exaggerated the stock problem – the monetary overhang. This led to unncessarily strong measures of confiscatory monetary reform, with severe adverse effects

on the SOEs. Ultimately, state "bail out" of the SOEs led to destabilization of the economy.

5. The success of the 1989 reforms

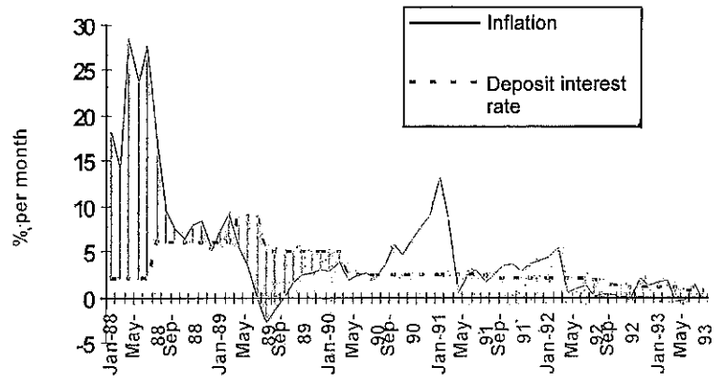
The withdrawal of support by the former CMEA countries, the failure of efforts to stabilize the economy, and the extremely high efficiency costs of rationing prompted the authorities to take a large step forward in the reform process. In March 1989, Vietnam enacted a major set of reforms that sought to combine stabilization with strong moves towards a market economy (Dollar 1994, Lipworth and Spitaller 1993, and World Bank 1993). Budgetary and monetary policies played a fundamental role in the stabilization package, while the measures in favour of a market environment included the abolition of price controls; unification of the exchange rates resulting in a fivefold devaluation of the dong; granting of full autonomy to SOEs in terms of their pricing, production and investment decisions; the return to the family farm on the basis of long-term leases; and the beginnings of reform of foreign trade and foreign direct investment.

The 1989 measures brought an initial surge in agricultural output (6.9%) and services (17.6%), which offset the losses in industrial output (4%). As a result, GDP rose by 8% (World Bank 1994). But the success of the reforms was particularly impressive in the area of combating inflation. The monthly inflation rate declined from 28% in March 1988 to slightly negative rates in August 1989 (see Chart 4). For the entire 1989, inflation was 34.7% compared with several hundred per cent in the preceding three years (see Chart 3 and Table 6).

Although there are no monthly or quarterly data on the state budget and the money supply for 1989, there is no doubt that the budgetary and credit policies had been firmly tightened at least in the first three to four months after the reform measures were announced, and that this was the decisive factor in reducing the inflation rate. State subsidies to SOEs were eliminated and interest rates on loans to enterprises rose to positive levels in real terms. Many SOEs were not able to pass the higher costs onto their customers, and the sharp reduction in profits (and hence cash flow) led to a shortage of

CHART 4

MONTHLY INFLATION AND DEMAND DEPOSIT INTEREST RATES



Sources: GSO (1994, pp. 56 and 98 and 1991, p. 67); Tran Trong Kim *et al.* (1991, p. 78); and World Bank (1992, p. 2).

working capital. In many enterprises, there were reduced working hours or temporary dismissal of staff, and in some, work had to cease altogether. This was reflected in the fall in industrial production (4%) in 1989.

At the same time, the significant increases in interest rates on household deposits (to 113% p.a. for three-month deposits in 1989-90) resulted in a tripling of household savings (from 1.5 to 5.3% of GDP, see Table 4). Given the tight monetary policy at that time, the proceeds must have been largely sterilized; that is, not spent or given as credit through the state bank. It could be argued that controlling the "flow" problem in the first half of 1989 was important in stabilizing the economy at that time.

The second half of 1989 saw some easing of the monetary and budget restraints. In order to alleviate the difficulties in the SOE sector, and in line with the substantial drop in bank deposit rates after June 1989 (from 9% per month in March to 5% per month for demand deposits), the interest rates on loans were deliberately reduced to below deposit rates, with a maximum of 3.9% per month on loan rates (GSO 1994). For long-term loans, the rate was only 0.8% per month.

On the budgetary side, there were rather generous payments for laid-off workers and army personnel. There were also significant capital expenditures, resulting in budget deficit remaining at over 7%

of GDP in 1989. This domestic easing in the second half of 1989, in turn, brought about an increase in domestic credit of 175% for the year (see Table 6). In August, inflation re-emerged and was running at a monthly rate of 2.5 to 3.0% during the last three months of 1989 and the first half of 1990 (see Chart 5).

Although fiscal and monetary restraints were responsible for the success of stabilization in the first half of 1989, the success of Vietnam on the inflation front in subsequent years was due also to the structural changes set in train by the reforms. Looking at 1989 as a whole, a decrease in inflation was accompanied by fairly rapid increases in domestic credit as well as a sharp devaluation of the dong against the US dollar. Furthermore, a slightly inverse relationship between changes in domestic credit and inflation rates seemed to have existed during the period 1989-93, in contrast to the period before the 1989 reform (see Table 6). Indeed, the correlation coefficients between the rates of change in domestic credit and in the general retail price level are 0.884, 0.862 and −0.098 for the periods 1978-88, 1978-93, and 1989-93 respectively.

In addition to factors such as increases in competition and output that could help reduce inflation, particularly in 1989 and 1993, one possible explanation of the somewhat paradoxical phenomenon in the inflationary movement is the large changes in asset portfolio choice made by the people. There was certainly evidence of a shift out of dollar and gold into dong holdings in 1989. The nominal exchange rate, for instance, remained relatively stable from March 1989 to mid 1990. Gold prices which were almost double the world price before the reform, stabilized at a level lower than the world price throughout 1989 (Kolodko *et al.* 1992). Also, as mentioned above, household deposits increased sharply during 1989 in response to increases in interest rates. Part of this would have been at the expense of gold and dollar holdings. These could have led to a considerable shift in the demand for money, enabling money supply to increase within a certain range without engendering increases in the price level.

In contrast, there appeared to have been no such portfolio shifts in 1990 and 1991. The prices of gold and foreign exchange increased well ahead of inflation (World Bank 1992). Household deposits as a percentage of GDP remained relatively stable (see Table 4). As a result, inflation again became more sensitive to the flow variables of public deficits and domestic credit expansion.

However, further decreases in the inflation rate in 1993 again did not follow this pattern. One important structural change occurring at this time was the expansion of credit to the private sector, especially to the rural households (World Bank 1994b). Given that the rural sector had captured about 70% of the loan market in 1993 and that 72% of households in this sector had previously taken loans from the informal sector, it is highly likely that a substantial part of the rapid advance in credit replaced borrowings from the informal sector. Therefore, credit expansion in the banking sector could have been offset by the fall in credit provided by the informal sector.

The government's success in stabilizing the economy after 1989 therefore was a combination of fiscal and monetary restraint as well as the asset portfolio choices of the people in response to the market-oriented reforms that were set in train. The latter enabled the government to ease credit conditions from time to time without re-igniting inflation.

6. Conclusions

This paper examines the theory of monetary overhang and repressed inflation in CPEs and argues that, as a result of microeconomic reforms undertaken in the late 1970s and early 1980s in Vietnam, there was no serious monetary overhang by the mid 1980s. The "stock" problem was therefore not significant. However, there was the very serious "flow" problem associated with the monetization of budget deficits and the deficits of SOEs.

The paper then argues that government measures that focussed on the insignificant stock problem while failing to deal with the flow problem were responsible for the failure of the 1985 reforms. Furthermore, confiscatory monetary reform might have exacerbated the stabilization problem by reducing the demand for real balances. The 1989 reform package, on the other hand, owed its success to the government's ability to stabilize the economy, at least initially, through significant budgetary and credit tightening. The continued success on the stabilization front in the latter part of 1989 and in subsequent years, however, depended on budgetary and credit restraint as well as shifts in asset portfolio choices on the part of the

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