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## Resisting orthodoxy in a highly distorted economy: economic policy in Peru

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Kiel working Paper No. 303

RESISTING ORTHODOXY IN A  
HIGHLY DISTORTED ECONOMY:  
ECONOMIC POLICY IN PERU

by

Federico Foders

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Contents	Page
Contents	I
Abstract	II
List of Tables	III
I. Introduction	1
II. Economic Development in Peru 1970 - 1985	3
1. Policy Background	3
2. Major Trends in the Performance of the Peruvian Economy	6
III. The "New Heterodoxy"	18
1. Economic Policy in Peru since July 1985	18
2. The Economic Consequences of "Heterodoxy"	21
IV. "Orthodox" Versus "Heterodox" Plans: Policy Options for Peru	27
Appendix A: Tables	31
References	33

## Abstract

Peru belongs to the club of Latin American countries which recently declined to follow "orthodox" adjustment programmes and implemented a "heterodox" policy package instead. The orthodox approach involves stabilisation by drastic budget cuts and monetary discipline, liberalisation of factor markets and the trade regime, whereas heterodox policies include strict price controls on factor and goods markets, an expansionary monetary policy, import protection and multiple exchange rates. Further, while orthodox measures entail a shock therapy, heterodox measures are associated with a gradualist approach.

This paper analyses the rationale for an heterodox medicine in the Peruvian case. First, the performance of the Peruvian economy in 1970 - 1985 is studied in an attempt to arrive at a diagnosis of the central disease affecting economic policy in Peru. The conclusion is that the mix of monetary, fiscal and exchange rate policies chosen was inconsistent and that this inconsistency seems to have contributed to serious imbalances at both the macro- and microeconomic levels. The inward-oriented industrialisation strategy followed by this country offered the appropriate background for the development of this inconsistency. This result, along with a critical review of the economic consequences of the Peruvian Government's heterodox plan, leads to the conclusion that this country could reap significant welfare gains from a reform of the policy regime in the direction of orthodox adjustment measures and a stronger world-market orientation.

List of Tables	Page
Table 1 - Indicators of Economic Growth, 1970 - 1985	7
Table 2 - Monetary Indicators I, 1970 - 1985	10
Table 3 - Monetary Indicators II, 1970 - 1985	12
Table 4 - Monetary Indicators III, 1970 - 1985	13
Table 5 - Structure of Economic Incentives for the Manufacturing Sector	16
Table 6 - Evolution of Monetary Indicators 1985 (1) - 1986 (4)	22
Table 7 - Evolution of the External Sector 1985 (1) - 1986 (4)	23
Table A 1 - Sectoral Origin of GDP	32
Table A 2 - Evolution of Employment 1970 - 1985	32

## I. Introduction

The outcome of stabilisation and liberalisation programmes implemented in Latin America during the seventies revealed to economists and policymakers concerned with economic development in the region the adverse consequences of inconsistent policy packages and a neglect of appropriate timing and sequencing of individual policies (CORBO, DE MELO 1985). When in the 1980s Latin American countries again faced adjustment problems a revision of these lessons was not really necessary, in spite of the fact that the relatively easy access to the international capital markets formerly enjoyed by these countries had been dramatically reduced after the debt crisis of 1982. The only noteworthy difference between the 1970s and the 1980s seems to be that adjustment under external restrictions additionally calls for a debt management strategy which should be compatible with a coherent stabilisation and liberalisation plan.

Moreover, attempts at stabilising and liberalising the economy in other parts of the developing world, notably in South-East-Asia, showed that the trade regime may also decisively influence the outcome of such an economic programme. South-East-Asian countries pursuing an outward-oriented strategy of economic development succeeded both in adjusting their economies and in maintaining, at the same time, virtually unrestricted access to the international capital markets regardless of the level of their accumulated foreign debt.

Notwithstanding the lessons from the past, Argentina, Brazil and Peru recently adopted a very unusual mixture of orthodox and heterodox policies in order to control tripple-digit inflation and reactivate their debt-ridden economies. The policy packages consisted of heterodox stabilisation

measures (price and wage controls) along with negative liberalisation (higher tariff and non-tariff protection, multiple exchange rates, negative real interest rates) and orthodox measures (major devaluations, a commitment to cut public expenditure and restrain monetary expansion). Another orthodox feature of these policy packages was that they were implemented as part of a shock treatment and thus represented a departure from the earlier policies of gradualism<sup>1</sup>.

While the Argentine and the Brazilian reforms (Plan Austral and Plano Tropical, respectively) achieved disinflation at rather low output cost only during the initial months of their unprecedented policy regimes (HEYMANN 1987; CARDOSO, DORNBUSCH 1987), the Peruvian version (implemented since July, 1985) led to an above-average growth of real GDP (8.5 percent) in 1986 accompanied by a considerable reduction in CPI-inflation (from 250 percent in July 1985 to an average of about 60 percent in 1986). This paper sets out to analyse the Peruvian experience focusing upon the impact of an heterodox-orthodox policy mix on the development prospects of a country pursuing an inward-oriented strategy of industrialisation. The next section gives a picture of overall economic development of Peru in the period 1970 - 1985 followed by an attempt to arrive at a diagnosis of this country's main disease. In Section III the Peruvian Government's view of the crisis and its response to it, the so-called "New Economic Policy", are discussed and confronted with the findings in the previous section. Finally, the last section explores alternative policy options for Peru.

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<sup>1</sup> Although the adjectives "orthodox" and "heterodox" could possibly be understood in several different ways, particularly within the Latin American context, in this paper these words are being used following their usage in the latest literature on Latin American macroeconomic policy (see the References) and in research projects carried out by the National Bureau of Economic Research (USA) and the Centre for Economic Policy Research (UK).



## II. Economic Development in Peru 1970 - 1985

### 1. Policy Background

Peru belongs to the group of Latin American countries which in the fifties and sixties were attracted by the industrialisation philosophy disseminated by the Economic Commission to Latin America (ECLA). This philosophy basically maintained that a country could accelerate the process of industrialisation and thereby insure itself against the risks of an unstable international environment only by changing the existing pattern of economic incentives in such a way that the available factors of production are channelled to the manufacturing sector. A further expansion of the already relatively developed primary sector of the economy was assumed to be incompatible with such long-run goals as sustained growth, full employment and income distribution.

In the case of Peru liberal trade policies and favourable world market conditions prevailing throughout the fifties had contributed to successive booms in primary exports, which not only improved this country's import capacity, but also translated into an average rate of growth of real gross domestic product of not less than 5 percent per annum. Especially the mining sector determined to a considerable extent Peru's role in the international division of labour as a supplier of key minerals to the industrial countries. In spite of such historical evidence in favour of free-trade policies Peru nevertheless adopted the ECLA recommendations in the late fifties and switched from an outward-oriented to an inward-oriented trade regime. Since then Peru has been pursuing an industrialisation strategy based on domestic demand growth and foreign savings with only short-lived interruptions.

The incentives for rapid industrialisation implemented in Peru primarily entailed a commitment of the government to an expansionary fiscal and an active incomes policy supplemented by an accommodating monetary policy. Value added derived from domestic production of manufactures was artificially increased through credit and other subsidies, and particularly so by tariff and nontariff barriers to international trade. Ceilings for the (nominal) interest rate were set at convenient levels in order to foster investment in physical capital. Firms adopting capital-intensive lines of industrial production could import capital and intermediate goods at a preferential (overvalued) exchange rate. These measures were taken within the framework of a generally repressed financial system (negative real interest rates and credit rationing) and foreign exchange controls. On the other hand, a subsidy-based promotion programme for non-traditional exports was initiated in 1968.

These policies, which can be associated with the Industrial Promotion Law of 1959, were continued throughout the seventies and eighties with only minor revisions. In 1970 a new General Law of Industries reinforced the overall goal of industrialisation and gave the government a strong participation in economic activity. Several new public enterprises were created and other, formerly private enterprises were taken over by the state. This extended the state's direct influence to such key industries as mining, oil, fish, steel and communications. At the same time the Labour Stability Law modified labour relations by automatically granting tenure to all workers employed for more than three years on a (formal) contractual basis. The government also intervened in the labour market by decreeing increases in wages and pensions for unionised and nonunionised private and public sector workers.

Other major changes in legislation occurring in the seventies focused on property rights in industry and agriculture. Reforms of industrial property aimed at securing workers a higher stake in corporate profits and co-determination in management affairs. Also, reforms were made to establish labour-managed firms drawing on the Yugoslavian experience. As concerns agriculture some 10 million hectares of land were confiscated from latifundia and distributed to peasant families. However, many of the favoured peasants never received legal documents certifying the new ownership rights. On the other hand, the government imposed tight controls both on producer and consumer prices of agricultural products. Marketing boards were awarded monopoly rights to trade selected products on the internal market, which in part could also be imported at preferential exchange rates. Since consumer prices never exceeded producer prices paid by the marketing boards this policy had an important subsidy element.

Although Peru joined the import-substitution club fairly late by Latin American standards, actually at a time when some of its pioneers, notably Brazil, were already tapping new sources of economic growth and therefore turning to more outward-looking policies, while still others, notably Argentina, were clearly unable to cope with the mounting imbalances both at the micro- and macroeconomic levels resulting from an excessive reliance on a small and stagnant domestic market, she rather continued sticking to an inward-looking strategy of economic development even in the first half of the eighties. The only noteworthy liberalisation effort undertaken from 1979 to 1982/3 and driven by an official acknowledgement that the Peruvian strategy might lead to unintentioned distortions did not go very far.

## 2. Major Trends in the Performance of the Peruvian Economy

What impact did these policies have on the performance of the Peruvian economy in the period 1970 - 1985?

The Peruvian economy achieved respectable growth rates of real GDP of more than 4.5 % in the early seventies (Table 1).<sup>1</sup> After that the economy expanded at comparable rates of GDP growth only in the years of liberalisation (1979 - 1981) and in 1984. In the remaining years the rates did not reach the 2 % benchmark and in two cases GDP contracted in real terms. On average the rate of economic growth decreased in the seventies and became negative in the eighties; over the whole period 1970 - 1985 Peru grew at a rate of 2 % p. a. With population growing at an average rate of 2.4 % p. a. this meant a contraction of per capita income of 0.4 % p. a. Positive per capita rates could be achieved only in the early seventies and in the years of liberalisation.

The poor performance of the Peruvian economy after 1975 - with the exception of the short liberal intermezzo from 1979 to 1982 - culminated in a substantial decrease in real income per capita in 1983. Not surprisingly, investment behaviour fits quite well into the picture drawn by GDP evolution: expansion took place in the first half of the seventies and then again during the said attempt at liberalisation; thereafter only negative rates prevailed. The pattern

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<sup>1</sup> The analysis in this paper focuses on the rates of change of key economic indicators, in order to detect policy shifts and trends. Since both positive and negative rates matter, log-changes were preferred to relative changes. As is widely known, an important advantage of the log-change over the relative change is its symmetry (regardless of the sign) with respect to the direction of change. In contrast, the rate of relative change necessary to attain the original level of a variable which has increased differs from the rate of relative change responsible for this increase.

Table 1 - Indicators of Economic Growth, 1970 - 1985

Year	Gross Domestic Product <sup>a</sup>		Consumption <sup>a</sup>				Gross Capital Formation <sup>a</sup>		Exports <sup>a</sup>		Imports <sup>a</sup>		Population
	Total	Per Capita	Total	Per Capita	Private	Government	Total	Per Capita	Total	Per Capita	Total	Per Capita	
Annual Changes <sup>b</sup> (%)													
1970	-	-	-	-	-	-	-	-	-	-	-	-	-
1971	4.6	1.8	5.5	2.7	5.4	6.6	14.5	11.7	-5.1	-7.9	2.7	0.0	2.8
1972	1.9	-0.8	5.2	2.5	5.1	6.6	-21.8	-24.5	6.9	4.1	-2.0	-4.7	2.7
1973	4.9	2.3	5.2	2.6	5.1	5.8	59.1	56.5	-38.7	-41.3	11.1	8.5	2.6
1974	6.8	4.3	4.9	2.4	4.4	8.7	28.7	26.1	3.0	0.4	25.5	23.0	2.5
1975	4.7	2.1	4.7	2.2	3.4	13.5	-3.1	-5.6	2.4	-0.2	-6.4	-8.9	2.5
1976	0.9	-1.7	3.6	1.0	3.3	5.4	-13.0	-15.6	0.1	-2.5	-10.1	-12.7	2.6
1977	-0.1	-2.6	2.9	0.4	1.3	13.1	-15.2	-17.7	11.0	8.5	0.3	-2.2	2.5
1978	0.7	-1.9	-5.3	-7.8	-4.3	-11.2	-27.7	-30.2	13.3	10.7	-36.0	-38.5	2.6
1979	6.2	3.7	3.7	1.2	5.2	-6.2	9.6	7.0	12.4	9.8	9.3	6.7	2.5
1980	4.4	1.8	6.9	4.3	4.8	20.2	30.9	28.3	-9.6	-12.2	26.4	23.9	2.6
1981	4.3	1.8	4.3	1.8	5.2	-1.6	18.7	16.1	-3.0	-5.5	14.8	12.3	2.5
1982	0.3	-2.3	2.5	-0.1	0.9	12.5	-7.5	-10.0	5.9	3.4	2.2	-0.4	2.6
1983	-13.2	-15.7	-8.7	-11.3	-8.6	-9.2	-50.6	-53.2	-9.9	-12.4	-35.1	-37.7	2.5
1984	3.9	1.3	3.3	0.7	5.0	-7.2	-9.1	-11.7	7.8	5.3	-21.7	-24.2	2.5
1985	1.4	-1.2	-3.7	-6.3	-4.3	-0.4	-22.9	-25.5	3.5	0.9	-28.2	-30.8	2.6
Average Rates (%)													
1970-75	3.8	1.6	4.3	2.1	3.9	6.9	12.9	10.7	-5.3	-7.5	5.2	3.0	2.2
1975-80	2.0	-0.1	2.0	-0.2	1.7	3.6	-2.6	-4.7	4.5	2.4	-1.7	-3.8	2.1
1980-85	-0.6	-2.7	-0.4	-2.5	-0.3	-1.0	-11.9	-14.1	0.7	-1.4	-11.3	-13.5	2.1
1970-80	3.2	0.2	3.4	1.1	3.1	5.7	5.6	3.3	-0.4	-2.8	1.9	-0.5	2.4
1970-85	2.0	-0.4	2.2	-0.2	2.0	3.5	-0.6	-3.0	0.0	-2.4	-3.0	-5.4	2.4

<sup>a</sup> Raw data series in constant intis of 1979, deflated with specific indices constructed by the Instituto Nacional de Estadística.

<sup>b</sup> Log-changes.

Source: Data: Instituto Nacional de Planificación. Dirección General de Planificación Económica. Series Estadísticas Macroeconómicas Peru: 1970 - 1985, Lima, September 1986; own calculations.

of investment went hand in hand with expanding consumption, particularly government consumption. The share of total consumption in GDP, already considerable in 1970 (69.9 %), increased to 72.1 % in 1985.

Imports closely tracked the evolution of GDP and investment but at rather low levels. Imports decreased already in 1975 - 1980 and then further in the eighties. Exports, on the other hand, seemed to behave occasionally as a substitute outlet for domestic production, because they achieved their highest growth at a time when government and private consumption as well as gross investment decreased significantly. However, during the entire period under study exports were rather depressed, showing negative rates in the early 1970s and a somewhat better performance in 1975 - 1980 followed by stagnation in the eighties.

To the extent that the success or failure of the policies implemented in Peru are reflected in the evolution of real income per capita, aggregate supply and aggregate demand the net balance is more on the side of failure than of success, even for the apparently healthy years from 1970 to 1975. The key variables seem to have been investment and the foreign sector. The strong expansion of investment - mostly government investment - in the first half of the seventies obviously did not contribute to a higher productivity and thus neither to a higher income nor to an improved export basis. A growing share of national income was consumed and not saved, in an attempt to distribute a product which was stagnating in absolute terms and already falling in per capita terms. Import demand for capital and intermediate goods behaved accordingly, with periods of expansion and contraction subject to stop-and-go cycles in aggregate demand and foreign exchange availability; imports of consumption goods rose especially during the short period of liberalisation, partly reflecting a lack of competitiveness of the local manufacturing sector.

The trade, agricultural and factor market policies had an important impact on the sectoral structure of the economy. As could be expected, the excessive inward-orientation worked as a disincentive for the primary sector. Table 1 in Appendix A shows that the share of GDP originating in agriculture and fishing decreased by 28 % from 1970 to 1980 and recovered only slightly thereafter. Mining's share fell from 8.2 % in 1970 to 6.2 % in 1975 but climbed to 10 % during the liberalisation phase, a level that could be maintained until 1985. In contrast, manufacturing GDP, which constituted an important policy target, moved only very slowly: manufacturing improved by a poor 4 % from 1970 to 1985. Peru's share of manufacturing in GDP was the highest of all Latin American countries in 1980 and, taking into account the general tendency observed in this region's industrialization pattern<sup>1</sup>, seems to have reached "maturity" in the late seventies, with further increases being unlikely.

The half-hearted land reform together with the interventionist and profit-squeezing agricultural policies contributed to a significant contraction of agricultural production in the seventies, which, in turn, led to widespread un- and underemployment in rural areas. Employment statistics for Peru are not known for their reliability but may at least approximate the order of magnitude of the evolution of employment opportunities in the agricultural sector. As shown in Table A 2, employment (defined as adequately employed plus underemployed persons) in agriculture grew with an average rate of 0.8 % p. a. in the seventies, whereas employment in the rest of economy, including public administration and services, expanded six times faster. Agricultural production seems to have revived in the eighties, with

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<sup>1</sup> Import substitution contributed to an accelerated expansion of the manufacturing sectors in the early years. After "easy" import substitution was exhausted, growth slowed down and the sector eventually stagnated or even contracted in some countries.

Table 2 - Monetary Indicators I, 1970 - 1985

Year	Aggregates <sup>a</sup>			Domestic Credit <sup>b</sup>			Inflation <sup>c</sup>
	Money	Quasi-Money	Money and Quasi-Money	Public Sector <sup>d</sup>	Private Sector	Total Domestic Credit	
Annual Changes <sup>e</sup> (%)							
1970	-	-	-	-	-	-	-
1971	4.4	4.1	4.3	21.1	14.2	17.3	5.4
1972	17.6	-0.1	13.4	21.8	10.7	15.9	7.6
1973	13.3	3.6	11.2	30.2	9.9	20.3	9.3
1974	19.1	-4.5	14.6	14.1	-5.5	5.4	15.4
1975	-5.5	-11.5	-6.5	18.5	5.2	13.2	21.4
1976	-5.6	-15.0	-7.1	25.6	-5.1	14.8	28.6
1977	-13.5	7.2	-10.1	4.7	-13.3	-0.7	32.3
1978	-8.1	37.9	1.8	1.9	-14.2	-2.4	45.6
1979	2.2	42.9	14.3	-56.8	7.9	-36.5	51.0
1980	-0.9	38.1	14.2	-10.5	26.2	5.3	46.5
1981	-17.9	11.7	-4.0	-3.0	24.3	10.9	56.2
1982	-19.9	21.3	3.1	-0.1	0.4	0.2	49.7
1983	-7.4	-1.5	-3.7	42.3	2.4	22.6	74.7
1984	2.7	14.1	10.0	-8.6	-8.6	-8.6	74.3
1985	38.1	-33.7	-2.3	-53.0	-18.1	-35.9	96.8
Average Rates (%)							
1970-75	8.2	-1.4	6.2	17.6	5.8	12.0	9.9
1975-80	-4.3	18.5	2.2	-5.9	0.3	-3.3	34.0
1980-85	-0.7	8.3	0.5	-3.7	0.1	-1.8	58.6
1970-80	2.1	9.3	4.6	6.4	3.3	4.8	23.9
1970-85	1.2	9.5	3.3	3.0	2.3	2.6	38.4
<sup>a</sup> Money: currency outside banks plus private sector demand deposits; Quasi-money: time, savings and foreign currency deposits of residents; end of period values (intis);							
<sup>b</sup> End of period values (intis);							
<sup>c</sup> Claims on government (net), government enterprises and development banks;							
<sup>d</sup> Consumer price index (1980 = 100);							
<sup>e</sup> Log-changes.							

Source: Data: International Monetary Fund, International Financial Statistics; own calculations.



the rate of growth of employment again recovering, albeit still remaining unable to catch up with the corresponding rates for the growth of population and its share of economic active persons.

The role of agriculture in generating employment has always been strategic in most developing countries and particularly so in Peru. In 1985 agriculture still accounted for 37 % of total employment, down from nearly 60 % in 1970, whereas manufacturing's share stagnated at about 10 % over the whole period from 1970 to 1985. With the said agricultural policies along with strong incentives toward investment in physical capital in form of negative real interest rates, an overvalued exchange rate and the Labour Stability Law, labour market disequilibria could hardly be prevented. The decline of agriculture induced the rural population to migrate and to join the urban working poor. The excess supply of unskilled labour resulted in the establishment of a black informal labour market in the biggest cities and especially in metropolitan Lima, where an important part of national income originates. Although severe shortcomings in national income statistics unfortunately do not even permit a rough estimate of the real wage impact these policies had, it can at least be hypothesised that traditional inequalities in the functional distribution of income should have been further exacerbated during the period under study. In fact available data on domestic income published by the Instituto Nacional de Estadística show that the share of wages and salaries in domestic income decreased from 40.5 % in 1970 to around 36 % in 1980 and recovered only slowly thereafter.

It would be wrong to infer from this that the winners can be found on the side of private capital. Instead, as has been concluded from the real indicators (Table 1) and as can readily be seen from the monetary indicators (Tables 2 - 4),

Table 3 - Monetary Indicators II, 1970 - 1985

Year	Exchange Rate		Forreign Currency Re- serves <sup>c</sup>	Trade Ba- lance <sup>d</sup>	Government <sup>e</sup>			Infla- tion <sup>f</sup>
	Nomi- nal <sup>a</sup>	Real <sup>b</sup>			Expenditure		Defi- cit	
					Current Prices	Real		
Annual Changes <sup>g</sup> (%)								
1970	-	-	-	-	-	-	-	-
1971	0.0	-2.2	21.6	-12.1	15.0	9.6	85.0	5.4
1972	0.0	-3.3	12.9	-1.9	13.2	5.6	21.4	7.6
1973	0.0	3.1	10.9	-4.1	17.7	8.4	16.7	9.3
1974	0.0	1.8	64.0	-47.7	7.2	-8.2	18.8	15.4
1975	15.1	2.6	-88.9	-206.9	39.0	17.6	49.1	21.4
1976	40.2	16.2	-19.2	165.2	40.1	11.6	-9.5	28.6
1977	46.6	20.2	21.4	39.5	37.8	5.5	16.8	32.3
1978	55.9	17.8	8.1	66.1	40.2	-5.3	-38.3	45.6
1979	26.3	-12.9	130.5	66.5	49.2	-1.8	-204.2	51.0
1980	28.9	-4.4	33.1	-36.7	70.9	24.4	156.4	46.5
1981	44.2	-3.3	-50.4	-114.5	51.4	-4.8	52.7	56.2
1982	66.9	19.2	10.3	17.7	45.3	-4.4	-20.5	49.7
1983	83.0	9.5	3.6	66.1	69.0	-5.7	69.3	74.7
1984	92.0	20.0	16.4	39.1	72.0	-2.3	-41.0	74.3
1985	89.5	-7.7	12.8	7.2	94.5	-2.3	-81.4	96.8
Average Rates (%)								
1970-75	2.5	0.3	3.4	-45.5	15.4	5.5	31.8	9.9
1975-80	33.0	6.2	29.0	50.1	39.7	5.7	-13.1	34.0
1980-85	62.6	6.3	-1.2	2.6	55.4	-3.3	-3.5	58.6
1970-80	19.4	3.5	17.7	2.5	30.0	6.1	10.2	23.9
1970-85	36.8	4.8	11.7	2.7	41.4	3.0	5.7	38.4

<sup>a</sup> Intis per US dollar; end of period rate;

<sup>b</sup> Nominal exchange rate inflated by the US wholesale price index (1980 = 100) and deflated by the domestic consumer price index (1980 = 100);

<sup>c</sup> US dollars; end of period value;

<sup>d</sup> US dollars; balance of merchandise trade (fob)

<sup>e</sup> Intis; real expenditure and deficit in 1980 intis;

<sup>f</sup> Consumer price index (1980 = 100);

<sup>g</sup> Log-changes.

Source: Data: International Monetary Fund, International Financial Statistics; own calculations.

Table 4 - Monetary Indicators III, 1970 - 1985

Year	Total Fo- reign Debt <sup>a</sup>	Medium- and Long-Term Foreign Debt		Private Debt	Short- Term Fo- reign Debt <sup>b</sup>
		Public Debt			
		Total	New Credits		
Annual Changes <sup>c</sup> (%)					
1970	-	-	-	-	-
1971	0.3	5.5	-3.7	6.0	-2.7
1972	3.8	12.4	28.5	-2.5	0.8
1973	7.9	33.0	68.8	1.7	-2.7
1974	26.7	46.3	67.4	4.8	26.2
1975	19.5	40.5	11.2	2.1	6.1
1976	18.0	15.9	-16.1	1.9	12.0
1977	16.0	21.3	31.2	1.1	8.0
1978	8.8	19.1	-30.8	1.1	-8.9
1979	0.1	12.2	-12.0	-2.4	-33.6
1980	2.8	4.8	54.6	4.9	5.5
1981	1.0	2.8	24.8	9.8	3.2
1982	17.1	11.2	23.0	10.4	35.9
1983	9.7	20.7	-23.4	-5.1	-30.3
1984	7.6	16.7	-22.6	-7.2	-7.4
1985	3.0	8.0	-61.8	-8.5	-16.0
Average Rates (%)					
1970-75	9.7	23.0	28.7	2.0	4.6
1975-80	7.6	12.2	4.5	1.1	-2.8
1980-85	6.4	9.9	-10.0	-0.1	-2.4
1970-80	9.5	19.2	18.1	1.7	1.0
1970-85	8.9	16.9	8.7	1.1	-0.2
<sup>a</sup> Short-, medium- and long-term public and private foreign debt;					
<sup>b</sup> Public and private short-term foreign debt;					
<sup>c</sup> Relative changes.					

Source: Data: Instituto Nacional de Planificación. Dirección General de Planificación Económica, Series Estadísticas Macroeconómicas Peru: 1970 - 1985, Lima, September 1986; own calculations.

labour and the private entrepreneurial sector have suffered from persistent crowding out by an ever expanding public sector. Government expenditure saw high growth rates in nominal as well as in real terms in spite of a continually growing budget deficit. The pattern since 1976 has been one of alternating faster and slower expansions with occasional contractions of the deficit, with the deficit's share in GDP reaching 12.1 percent in 1983.

The public sector's demand for savings expanded at rates which by far exceeded the ones achieved by overall economic activity and was satisfied from both domestic and foreign sources. In the early seventies domestic credit to the public sector grew at double-digit average rates until the late seventies, when it contracted for the first time, jumping again in 1983 and finally resuming contraction toward the mid 1980s. Heavy borrowing abroad by the government began in 1972 and peaked in 1974; on average foreign public debt rose particularly in the early seventies and continued at fairly high levels throughout the whole period under study.

Combined with an almost non existent local capital market (FISCHER 1987) and a policy of maintaining a fixed nominal exchange rate for several years in the early seventies an expansion of the money supply of such an order cannot be neutral with respect to the price level. It may not surprise, therefore, that inflation as measured by the consumer price index took a first two-digit jump from 1973 to 1974 and since then only twice proceeded with a rate lower than the one prevailing the year before. Changes in the CPI reached an average rate of 58.6 % p. a. in the eighties.

In the face of continually rising inflation pushed by excessive public lending Peru practiced an exchange rate policy designed to guarantee a (rationed) cheap dollar for impor-

ters of capital and intermediate goods as well as food products and a dear dollar for financial capital inflows (mainly credits)<sup>1</sup>. Adjustments to the nominal exchange rate began in 1975. From 1976 to 1978 and then again from 1982 to 1984 devaluations exceeded the changes in the domestic CPI. In all other years during this period the domestic currency was overvalued with respect to the dollar (Table 3). This is clearly reflected in the real exchange rate vis-a-vis the US dollar, which depreciated from 1973 to 1978 and from 1982 to 1984, and appreciated during the liberalisation period. Devaluations exceeding CPI inflation lead to depreciation of the real exchange rate, while the opposite occurred when devaluations remained under the rate of inflation. With a certain time lag, the trade balance produced a textbook-like surplus in the wake of a depreciating real exchange rate and, similarly, a deficit following the appreciation or only marginal depreciation of the real exchange rate.

It was precisely the exchange rate policy that neutralised the potential benefits of liberalisation in 1979 - 1982. For the first time the government had started to remove tariff and non-tariff trade barriers achieving a decrease in effective protection of the manufacturing sector from a weighted average level of 121.9 % in 1978 to 74.3 % in 1981 (Table 5). With the real exchange rate appreciating an import boom ensued, which proved particularly harmful to the uncompetitive Peruvian industry and thus paved the way for another upturn in the demand for protection from local industry and unions. As can be seen from Table 5 not even one single sector of the manufacturing industry was free of the anti-export bias brought about by the combined effect of an overvalued exchange rate and the tax on exports implied by import protection. The massive subsidies offered to so-

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<sup>1</sup> The overvalued exchange rate for capital imports contributed to distort the interest differential existing between local and foreign credit.

Table 5 - Structure of Economic Incentives for the Manufacturing Sector

Industry	ISIC	Gross Effective Protection Rate <sup>a</sup>		Value Added Shares <sup>b</sup>		Net Effective Protection Rate <sup>c</sup> 1981		Anti-Export Bias <sup>d</sup> 1981
		1978	1981	1978	1981	Domestic Market	Export Market	
Food products	311	216	94	16.7	16.2	55	-14	1.8
Beverages	313	140	88	8.5	9.2	70	-2	1.7
Tobacco	314	281	55	2.0	2.3	24	-6	1.3
Textiles	321	132	121	11.5	10.4	77	-62	4.7
Wearing apparel	322	85	87	1.8	1.1	50	-40	2.5
Leather products	323	124	106	0.6	0.6	65	-50	1.3
Footwear	324	177	89	1.2	1.0	51	-19	1.9
Wood products	331	71	52	1.9	1.5	22	-18	1.5
Furniture	332	69	97	0.6	0.5	58	-13	1.8
Paper products	341	78	56	2.8	2.7	25	-22	1.6
Printing, publishing	342	68	32	1.8	1.8	6	-7	1.1
Chemicals	351/2	47	27	11.5	11.7	2	-12	1.2
Petroleum refineries	353/4	58	75	3.1	3.4	40	-46	2.6
Rubber products	355/6	64	44	3.4	4.0	15	-6	1.2
Non-metallic minerals	361/2/369	85	50	3.7	4.0	20	-9	1.3
Basic metals	371/2	113	40	15.5	14.6	12	-21	1.4
Metal products	381	41	66	3.6	3.4	33	-25	1.8
Non-electrical machinery	382	41	31	3.0	3.9	5	-4	1.1
Electrical machinery	383	75	50	4.0	4.4	20	-6	1.3
Transport equipment	384	44	27	1.8	2.6	2	-6	1.1
Other manuf. products	385/390	147	57	0.8	0.7	26	-7	1.4

<sup>a</sup> Estimated for domestic sales following the Balassa-method (non-tradeables assumed to have zero nominal protection) using an Andean Group input-output table and simple average nominal tariffs; percent of value added;

<sup>b</sup> Sectoral composition of manufacturing value added at 1975 prices (percentages);

<sup>c</sup> Gross effective protection rates corrected by export incentives and taxes. The existing tariff level, together with fiscal incentives for manufactured exports were estimated to contribute to a 25 percent overvaluation of the exchange rate in 1981, compared with the hypothetical free trade rate;

<sup>d</sup> Net effective protection rate for the domestic market plus 1 divided by the corresponding rate for exports plus 1.

Source: World Bank, Peru. The Manufacturing Sector: Performance and Policy Issues, Unpubl. Doc., Washington, July 22, 1983; UNIDO, Industrial Restructuring in Peru: Policies for Growth and Development, Unpubl. Doc., Vienna, February 26, 1986: own calculations.

called non-traditional exports (tax reimbursements (CERTEX) and cheap export finance (FENT)) since the early seventies and comparable to a disguised devaluation were incapable of rendering manufacturing exports profitable.

The economic development of Peru in the period from 1970 to 1985 can be summarised as one of accentuated inward orientation and incoherent policies. The only rather short liberalisation experience from 1979 to 1982 failed to bring about a change in the inward orientation of economic policy: Some trade barriers were dismantled but the overvalued exchange rate was maintained along with relatively high levels of public spending. As measured by GDP per capita, this industrialisation strategy did not lead to higher but in fact to a lower level of economic development (real GDP per capita remained below the 1970 level from 1983 to 1985). Underlying the closed-economy approach was a fundamental inconsistency in the monetary sector of the economy: uncontrolled credit demand by the public sector together with an unguided exchange rate policy<sup>1</sup>. Some imbalances, though, are of an institutional nature, as far as the labour market and property rights in agriculture are concerned. Also, the Peruvian economy is occasionally exposed to climatic shocks ("El Niño") with an adverse impact on some industries. However, the overall picture clearly points toward recurring inconsistencies in domestic policy<sup>2</sup>.

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<sup>1</sup> In this respect, the Peruvian case presents similarities to the Argentine case. On this see Fernandez (1985).

<sup>2</sup> This diagnosis of the Peruvian disease implied by the analyses of the policy background and the major trends determining Peru's economic performance is being formally tested in Foders and Kirkpatrick (1987).

### III. The "New Heterodoxy"

#### 1. Economic Policy in Peru since July 1985

The government that came to power on July 28, 1985 almost immediately implemented an economic policy package<sup>1</sup> consisting of

- nominal wage hikes exceeding inflation, mainly for public sector employees,
- lower taxes and higher public expenditure,
- nominal interest rate ceilings substantially lower than the inflation rate (the nominal interest rate was reduced gradually from 280 % in July 1985 to 40 % in June 1987),
- a fixed exchange rate vis-a-vis the US dollar, after an initial devaluation of 12 percent,
- a freeze of consumer and producer prices, after minor adjustments in the relative prices,
- higher tariff and nontariff barriers for manufactures and
- a limit to foreign debt service payments amounting to 10 % of export earnings.

This economic plan was called "heterodox" and considered to be an adequate response to the deep economic crisis experienced in Peru since 1983. The response was based on a particular perception of the crisis and its causes: The existence of tripple-digit inflation was not associated with excess demand or excess money supply, but rather with cost-push arguments. The domestic cost of capital was identified as the main factor exerting pressure upon production costs,

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<sup>1</sup> The so-called "New Economic Policy" was disclosed in the latest development plan 1986 - 1990 (Presidencia de la República 1987); the measures taken by the new government were published in "El Peruano".



although the exchange rate was also blamed, to the extent that devaluations lead to dearer imported capital and intermediate goods. Excess demand was deemed impossible, due to considerable idle capacity existing in the manufacturing sector. Continuously increasing production costs were understood to fuel inflationary expectations. The fact that aggregate demand did not grow at acceptable rates was attributed to both falling real wages, explained by insufficient nominal wage adjustments, and severe cuts in public spending by the outgoing government.

The exchange rate was assumed to be neutral with respect to the balance of payments, i. e. with virtually no influence on merchandise trade, services and capital flows. Therefore, a fixed domestic price of the dollar was hypothesised to have no negative effect on foreign currency reserves. On the other hand, domestic credit, the other component of money supply, was seen to have been restricted in the past, to the point of imposing severe limits on future growth.

Since the government characterised the economic situation prevailing in mid 1985 as one of recession-cum-inflation the focus was on short-run disinflation and reactivation of the economy. In the face of unused capacity investment would play no central role at first. Consequently, in this view, economic policy should bring about a rapid expansion of consumption with its usual short-run impact on income and employment; the low level of capacity utilisation would prevent any inflationary pressures. Existing inflation would be curbed through price and exchange rate controls along with low interest rate ceilings.

Before implementing strict price controls the government adjusted public utilities' prices as well as fuel and food prices, in order to correct some of the long prevailing distortions of relative prices, but particularly to increase

the relative prices of agricultural products. In 1987 the system of controls was partly relaxed and a system of regular price monitoring came into being, although the original intention of the new government had been to institutionalise "concerted action" among government, industry and unions, aiming at a social consensus in pricing matters. The latter soon turned out to be unfeasible.

That money demand had developed in the direction of a significant dollarisation of the economy was also acknowledged by the new government. The classic functions of money as a store of value and a unit of account were being satisfied by the dollar and not by the sol; in many transactions the sol had even lost its role as a medium of exchange. The government attacked currency substitution by freezing dollar-denominated deposits, at first for three months, and fixing the official exchange rate at an overvalued level. At the same time, a system of multiple exchange rates was created, with a much less overvalued financial rate, the said official rate and a legalised black or free rate. When dollar-denominated deposits were again at the disposal of the public they had to be converted to national currency at the official rate. Investors were deterred from further currency substitution because in the moment of purchasing dollars in the free market with the proceeds from dollar deposits a substantial loss was incurred. Furthermore, confidence in the domestic currency was to be re-established by introducing a new currency, the inti, at a rate of 1,000 soles per inti. Finally, starting January 1987 the fixed exchange rate was substituted by a preannounced crawling peg, with monthly devaluations of the official rate running at 2.2 percent.

Basically, the traditional Peruvian policy of highly subsidising industry, both directly (credits from development banks, subsidies for manufactured exports, import protec-

tion) and indirectly (subsidies for agriculture to guarantee low food prices, increased government procurement along with higher public expenditure) was continued. In addition, two employment programmes were initiated, one for public works (PAIT) and one for private industry (PROEM), and financed from the budget. The Labour Stability Law was amended to reduce the pre-tenure period of employment from three years to three months, but also to allow for untenured short-run contracts.

In an attempt to get hold of firms' savings, usually invested in the local "informal capital market" at positive real interest rates, an investment-employment fund was created in 1987, this being one of the first medium-term measures. The funds are to be raised from purchases of government debt bonds by industry and earmarked to complement private investment at a rate of 1 inti for every 2 intis invested by private companies. A follow up of this policy can also be seen in the nationalisation of a part of the private system of financial intermediation, consisting of some banks, insurance companies and investment firms belonging to Peruvian nationals.

As far as fiscal policy is concerned, expenditure was reshuffled, the cuts occurring in long-run public investment, defense spending, and particularly in public debt service payments. On the other hand, subsidies and public consumption expenditure were planned to increase.

## 2. The Economic Consequences of "Heterodoxy"

As measured by the evolution of the economic indicators for Peru (Tables 6 and 7) on a quarterly basis the new government's economic plan achieved price stabilisation and an important expansion of output during the period extending from 1985, third quarter, to 1986, fourth quarter. The quarterly

Table 6 - Evolution of Monetary Indicators 1985 (1)  
- 1986 (4)

Year/ Quarter	Aggregates <sup>a</sup>			Domestic Credit <sup>b</sup>			CPI <sup>d</sup>
	Money	Quasi-Money	Money and Quasi-Money	Public Sec- tor <sup>c</sup>	Pri- vate Sec- tor	Total	
Quarterly Changes <sup>e</sup> (%)							
1985 1	-	-	-	-	-	-	-
2	16.4	18.8	18.1	7.4	24.7	15.7	30.5
3	55.5	5.2	24.0	13.5	17.1	15.3	28.5
4	43.0	4.7	23.0	-0.9	9.5	4.5	11.3
1986 1	23.2	-0.4	12.7	-13.2	4.9	-3.2	12.3
2	7.1	3.0	5.4	14.1	16.2	15.3	12.1
3	12.3	3.7	8.9	22.3	11.3	16.0	11.7
4	19.3	8.7	15.3	44.4	14.2	28.8	11.4
Annual Changes (%)							
1984/85	38.1	-33.7	-2.3	-53.0	-18.1	-35.9	96.8
1985/86	61.9	15.0	42.3	42.3	46.5	56.9	57.6

<sup>a</sup> Money: currency outside banks plus private sector demand deposits; Quasi-money: time, savings and foreign currency deposits of residents; end of period values (intis);

<sup>b</sup> End of period values (intis);

<sup>c</sup> Claims on government (net), government enterprises and development banks;

<sup>d</sup> Consumer price index (1980 = 100);

<sup>e</sup> Log-changes.

Source: Data: International Monetary Fund, International Financial Statistics; own calculations.

Table 7 - Evolution of the External Sector 1985 (1)  
- 1986 (4)

Year/ Quarter	Exchange Rate		Foreign Curren- cy Re- serves <sup>c</sup>	Merchandise Trade <sup>d</sup>			CPI <sup>e</sup>
	Nomi- nal <sup>a</sup>	Real <sup>b</sup>		Ex- ports	Im- ports	Balance (X - M)	
Quarterly Changes <sup>f</sup> (%)							
1985 1	-	-	-	-	-	-	-
2	32.6	2.2	-7.6	12.8	5.0	13.6	30.5
3	31.3	2.1	8.6	-0.9	-8.8	5.8	28.5
4	5.1	-5.6	17.5	-0.4	2.0	-2.1	11.3
1986 1	0	-13.8	2.6	-22.4	1.1	-32.3	12.3
2	0	-14.1	-14.5	-1.3	29.3	-49.2	12.1
3	0	-12.1	-1.6	10.2	13.1	-8.2	11.7
4	0	-11.0	-11.0	-4.8	13.9	-84.6	11.4
Annual Changes (%)							
1984/85	89.5	-7.7	12.8	-5.5	-17.0	7.2	96.8
1985/86	24.0	-50.9	-24.5	-17.1	33.5	-69.6	57.6

<sup>a</sup> Intis per US dollar; end of period rate;

<sup>b</sup> Nominal exchange rate inflated by the US wholesale price index (1980 = 100) and deflated by the domestic consumer price index (1980 = 100);

<sup>c</sup> US dollars; end of period value;

<sup>d</sup> US dollars; fob values;

<sup>e</sup> Consumer price index (1980 = 100);

<sup>f</sup> Log-changes.

Source: Data: International Monetary Fund, International Financial Statistics; own calculations.

changes in the CPI fell from 30.5 % to 11.3 % in 1985, remaining virtually at that level in 1986. At the same time, GDP grew at a rate of 8.5 % in real terms in 1986 (Banco Central de Reserva del Perú 1987).

Domestic credit was drastically cut, with the relevant growth rates decreasing 1985 and becoming negative in the first quarter 1986. Negative rates were also faced by the public sector, whereas the credit to the private sector continued at positive though much lower rates. Monetary aggregates also followed this trend, but with the severe cuts in the expansion of nominal money (M1) occurring much later, in the second quarter 1986. However, the short-lived truce in the flow of credit to the public sector came to a halt already in the third quarter 1986; the monetary aggregates returned to higher growth rates in the last quarter of that year. Thus, on an annual basis, the decrease in credit supply from 1985 to 1986 went almost unnoticed, if compared with Peru's monetary history from 1970 to 1984. In fact the changes in domestic money supply from 1985 to 1986 were in some cases even higher as the ones prevailing in the early seventies, and definitely much higher as the ones achieved in 1984/85.

Price controls were obviously quite successful in attenuating the link between money supply and the price level, as measured by the official CPI, at least until December 1986, although lower growth of domestic credit had been compensated by significant changes in foreign currency reserves in the second half of 1985. In spite of this, some effects of these policies were already showing since 1985: The real exchange rate appreciated significantly from 1985 to 1986 leading to negative export growth and higher imports and, thus, to lower reserves.

Some of the figures for 1987 available at the time of writing this paper not only confirm the overall trend in domes-

tic money supply observed in 1985 and 1986, but also indicate a new upturn in the rate of inflation. The change in the CPI in the first quarter 1987 reached 16.0 %, the highest level since the second quarter 1985. Although in January 1987 a preannounced crawling peg scheme was introduced, the real exchange rate kept on appreciating and the deficit in the balance of merchandise trade increased further in the first quarter (IMF 1987).

The dollarisation of the Peruvian economy could apparently be stopped during 1986 but recovered it's former momentum in the first months of 1987. This can be concluded from the evolution of quasi-money, which includes foreign currency deposits held by residents, in 1986, and from the developments in the domestic free dollar market in 1986/87. The Central Bank at first opted for direct interventions in the free dollar market aiming at a constant spread between the official and the free rate. After several unsuccessful attempts, it finally declared the free market illegal, in order to obstruct any further increases in the premium.

As far as the impact of the "New Economic Policy" is reflected in the basic economic indicators, this short-run approach was able to hide some of the more important symptoms of the Peruvian crisis, at least until the end of 1986. However, the underlying causes have not been dealt with yet. Instead, the performance of the Peruvian economy since mid 1985 draws a picture of marginal changes, with the fundamental imbalances remaining and, possibly, even growing.

The economic plan implemented by the Peruvian government can hardly constitute an appropriate answer to the Peruvian crisis as identified in Section II.1 of this paper. The main reason for this is that the policies implemented do not take into account the fact that Peru is a small open economy sub-

ject to external restrictions; these policies rather seem to assume that this country resembles a virtually closed economy. As measured by exports plus imports as a share of GDP the openness of the Peruvian economy increased from 33.9 % in 1970 to 44.6 % in 1980 and decreased to 37.4 % in 1985 (IMF 1986). The 1985 level of this indicator still clearly points toward a substantial influence of trade on the economic development of Peru.

The central inconsistency in the policy package can be seen in an expansionary fiscal policy along with an accommodating monetary policy which totally ignores external restrictions as represented by the evolution of the real exchange rate. In other words, an inherently open economy cannot be de-linked from the world economy by a discretionary exchange rate policy (supported by negative liberalisation), without deepening already existing disequilibria in the domestic economy and eventually adding new distortions.



#### IV. "Orthodox" Versus "Heterodox" Plans: Policy Options for Peru

The eighties have offered economists and policymakers a varied country experience in the field of stabilisation. Countries as Argentina, Brazil and Israel are good examples of an heterodox approach to stabilisation, whereas Bolivia presents an example of an orthodox approach. All these countries have in common that they attempted to stop high inflation and at the same time had to face external debt problems. The Peruvian case fits very well into this picture. What can we learn from these other experiences in order to better understand the prospects of the Peruvian plan and derive policy recommendations?

Behind inflation in Argentina, Bolivia, Brazil and Israel was a growing budget deficit that in the end had to be financed by central bank credit<sup>1</sup>. Inflation was repressed the heterodox way by preventing further movements in the price level by specific wage, price and exchange rate controls and cutting public spending as far as political constraints allowed. Although initially currency devaluations along with mild budget cuts and a package of controls achieved significant disinflation at low output cost, the lesson is that a stabilised price level can only be maintained in the medium run if the underlying fiscal imbalance is removed. For the latter, increases in public sector prices, lower nominal wage adjustments in the public sector, subsidy cuts and a realistic pace of external public debt servicing are necessary. In some countries other expenditure categories (defense) might be included in this list while in others a tax reform might help broaden the revenue base.

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<sup>1</sup> For an analysis of stabilisation plans in these countries the reader is referred to FISCHER, HIEMENZ and TRAPP (1985) and HEYMANN (1987) (Argentina), SACHS (1987) (Bolivia), CARDOSO and DORNBUSCH (1987) (Brazil) and FISHER (1987) (Israel).

In Argentina and Brazil public expenditure continued growing in the belief that global demand management and a moderate incomes policy would prevent real wage losses at only low employment cost. In Israel defense spending could not be significantly reduced for political reasons and nominal wage hikes reflecting the power of labour unions were well above the target rates. Servicing of external debt was continued by these countries as a means to retain their ability to borrow abroad and negotiate favourable debt rescheduling terms. In all cases short-run disinflation did not last. New inflationary pressures could not be contained, mainly due to political constraints on economic policy.

The Bolivian experience, in contrast, shows that if political support to end (hyper)inflation (Bolivia had one of highest rates in history) can be found, inflation can be abruptly brought down, even from the heights of four- and five-digit rates of price increase, at reasonable social cost. The measures adopted were a major devaluation together with radical budget cuts and a tax reform. Further, internal price controls were relaxed and the foreign exchange market began to be deregulated for both trade and financial capital transactions. The effect of this plan was an immediate stabilisation of the price level, despite substantial increases in the prices of public goods. Inflation came down from 20 000 % in mid 1985 to an average rate of 100 % in 1986 and could be maintained at this level thereafter.

From this short account of heterodox and orthodox stabilisation plans the following conclusions can be drawn: Stabilisation has been achieved the heterodox as well as the orthodox way virtually by cutting central bank credit to the government and avoiding an overvaluation of the exchange rate. The difference between the heterodox and the orthodox approach being the size of the budget cut involved.

As regards the ability of both approaches to reach the stabilisation goal there seems to be almost no difference in the short run. In the longer run, however, orthodox policies seem to be able to maintain price stability while heterodox policies tend to loose their power over time. Much more could be said about these approaches if their sensitivity to alternative timing and sequencing schemes were known. Similarly, the extent to which credibility can be attained should influence the outcome of either plan. The behaviour of expectations after a change in the regime has occurred, in either direction, also remains to be studied closely. Finally, it should be noted that there is a link between stabilisation and liberalisation. The orthodox package includes liberalisation as well, whereas heterodox policies are based on controls and regulations.

In the case of Peru a heterodox policy package was successful in stabilising the price level in the period July 1985 - December 1986. Economic indicators presented in Section III of this paper clearly point toward a revival of inflation since December 1986. Domestic credit to the government again started to expand and the overvaluation of the domestic currency belongs to the policy targets of the Peruvian economic plan. Output expansion reached an above-average rate in 1986 but the forecast for 1987 does not meet even half the 1985/86 rate. If this picture is confronted with the international experience in stabilisation referred to above, the conclusion would be that the prospects for long-run stabilisation of the price level are very dim in Peru, unless a new policy reform is carried out.

Given the long prevailing distortions of the Peruvian economy, reflected in a tendency toward low growth rates of GDP or even negative growth rates of GPD per capita, thereby showing a lack of profitable investment opportunities, Peru could probably reap substantial gains from liberalisation of

key markets accompanied by a coherent stabilisation package and a sound proposal to deal with the external debt problem.

Liberalisation in Peru would have to include the trade regime and the factor markets. A switch from an inward-oriented to an outward-looking trade regime would favour the development of a competitive industrial base. Removal of interest rate ceilings would contribute to a deregulation of the domestic capital market and create incentives for the mobilisation of internal savings. A liberalisation of the labour market would mean to end the discrimination implied by the Labour Stability Law. Deregulation on both factor markets together with a realistic exchange rate policy would help industry adjust to the challenges of the world markets by adopting labour intensive lines of production. A reform of property rights in agricultural land would lead to an efficient allocation of land, thereby paving the way for higher productivity in agriculture; this would have to be matched by a decontrol of producer and consumer prices of agricultural products.

Many of the distortions existing in the real sector of the Peruvian economy could be much better dealt with in the context of price stability. Taking into account that what is needed is a combined liberalisation-cum-stabilisation approach, the Peruvian case seems to be calling for a stabilisation plan along the lines of the orthodox package. The implementation of another plan of the heterodox family would at best perpetuate the imbalances existing today; in the long run the economy could possibly return to tripple-digit inflation with slow growth.

**Appendix A: Tables**

Table A 1 - Sectoral Origin of GDP<sup>a</sup> (percentages)

Sector	1970	1975	1980	1985
Agriculture, fishing	18.8	14.9	13.5	15.2
Mining and quarrying	8.2	6.2	10.0	10.2
Manufacturing	20.6	22.3	23.9	21.5
Construction	4.5	6.4	4.4	4.1
Government	8.9	8.5	7.6	8.2
Services and utilities	38.6	41.7	40.6	40.8
Total	100.0	100.0	100.0	100.0

<sup>a</sup> GDP at factor cost; constant intis of 1970.

Source: Comisión Económica Para América Latina, Series Históricas and Anuario Estadístico de América Latina; own calculations.

Table A 2 - Evolution of Employment<sup>a</sup> 1970 - 1985  
(Average growth rates per annum in %)

Period	Agriculture <sup>b</sup>	Non Agriculture <sup>c</sup>
1970-1975	0.7	4.2
1975-1980	0.8	3.5
1980-1985	2.8	1.0
1970-1980	0.8	4.7
1970-1985	1.8	3.9

<sup>a</sup> Adequately employed and underemployed;  
<sup>b</sup> Includes fishing, hunting and forestry;  
<sup>c</sup> Includes manufacturing, government, mining, construction and services.

Source: Instituto Nacional de Estadística, Boletín; own calculations.

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