

## VI Labor Markets

This section examines the role of labor markets in the adjustment process. In particular, it examines the role of labor market and wage flexibility in bringing about the rapid resource reallocation necessitated by the shocks and the policy response of the late 1970s and early 1980s.

### Institutional Characteristics

Characteristics of labor markets in developing countries can have a major impact on the transmission of shocks and policies to real economic activity. *Labor market segmentation*—between traditional and modern sectors, urban and rural labor markets, or skilled and unskilled members of the labor force—restricts labor mobility and can result in persistent wage differentials, which in turn can deter the efficient reallocation of resources in response to shocks and policy changes. *Wage flexibility* may be limited by a variety of labor market regulations such as minimum wage laws or by other factors such as powerful trade unions. Moreover, *public sector employment and wage policies* are often slow to adjust to changing economic conditions; the latter can have a considerable “leverage” effect on private sector wages.

Few of these features appear to be of major importance in the case of Thailand. A study by Bertrand and Squire (1980) found that labor market segmentation was small; urban labor markets, especially those in the Bangkok metropolitan area, were in general characterized by low unemployment rates and appeared to be well integrated with rural labor markets. The active urban informal sector provided employment at wages that were not far below those in the formal sector.<sup>20</sup>

<sup>20</sup>Although the evidence is fragmentary and somewhat outdated, Bertrand and Squire's analysis suggests that there is little open unemployment in rural Thailand; that wage differentials between agriculture and manufacturing do not appear to be out of line with productivity differentials; that minimum wages in the formal sector and wages of unskilled labor in certain manufacturing activities are not significantly different from each other and that they tend to move together over time; and that participation rates are high, and unemployment rates low, among migrant labor moving into the urban labor market.

Labor union activity in Thailand is limited; although minimum wage legislation exists, it is effective only in the public sector and in some large private sector firms, which employ a small fraction of the workforce. According to a survey conducted in 1986, less than one third of all enterprises in operation paid the minimum wage or higher, implying that fewer than half of all unskilled workers were being paid the minimum wage.<sup>21</sup> Moreover, the legislated real minimum wages declined through most of the period under consideration. The majority of employment occurs in agriculture, small private firms in the manufacturing sector, and the service sector, where labor markets appear to be competitive and wages flexible.

Finally, public sector employment, including the civil service and state enterprises, is relatively small. It grew quite rapidly during the expansionary phase of the late 1970s, rising from a little over 4 percent of the labor force to over 7 percent in only a few years, but its share in the labor force has remained broadly unchanged since then. Public sector employment accounts for about a fourth of all formal sector employment. The answer is not clear whether wages in the public sector contribute to wage pressures in the rest of the formal sector. On the one hand, civil service compensation and wages in state enterprises have tended to be considerably lower than those in the private sector. On the other hand, the differential between average private and public sector wages has tended to be maintained, suggesting that public sector wage adjustments could put pressure on wages in the rest of the formal sector.

### Trends in Employment and Unemployment

Table 9 presents trends in employment in the agricultural and manufacturing sectors during the

<sup>21</sup>Despite the limited effective coverage of minimum wages, revisions to the minimum wage do tend to raise the entire salary structure of the formal sector. However, as will be seen below, wage increases have thus far not generally been out of line with productivity developments, particularly in the manufacturing sector. The potential distortions that can arise from such regulations do not appear to have been relevant in Thailand during the period under study.

**Table 9. Employment Trends**  
(Percent Change)

	1975–80	1981–86	1987–93
Agriculture	...	2.1	2.0
Manufacturing	2.2	4.8	7.7

Sources: Thai authorities.

period under consideration. A striking feature of the trends is the increase in the growth rate of manufacturing employment in the postadjustment period, which suggests that labor market flexibility did permit significant resource allocation in response to the adjustment policies.

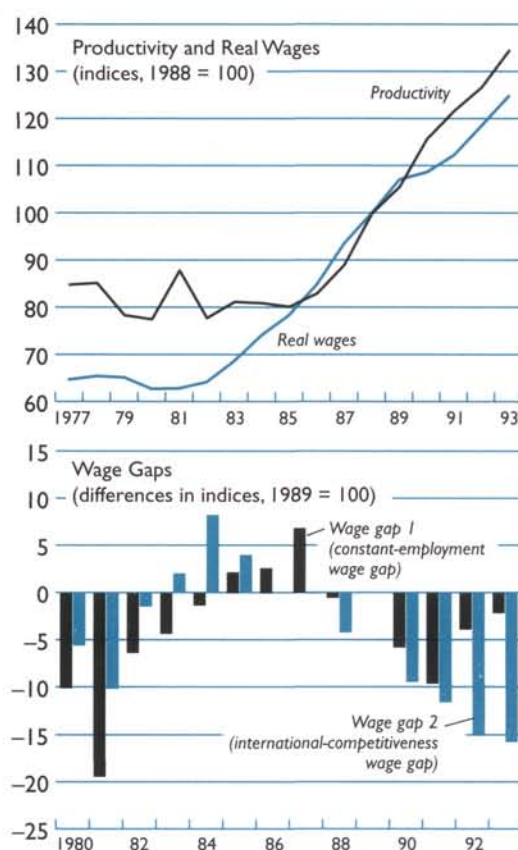
Data on unemployment in Thailand are fragmentary, and what information is available is fraught with problems, including significant changes in definitions during the period under consideration. Even so, certain clear trends are discernible in open unemployment rates.<sup>22</sup> The unemployment rate has remained small but has broadly paralleled movements in the output “gap” (Table 10). It rose moderately during the adjustment phase, peaking at 2½ percent in 1984–85, before declining sharply to an average of less than 1 percent in the postadjustment period. The absence of severe distortions in labor markets, as well as the behavior of real wages (discussed below), contributed toward keeping the impact of adjustment policies on unemployment small.

## Flexibility of Real Wages

Was there flexibility in real wages during the adjustment period—in particular, were movements in real wages consistent with the necessary adjustment in resource allocation? One measure of flexibility is the extent to which real wages have remained in line with the level that would be warranted by high-employment considerations. Another is the extent to which real wages remained in line with the level that would be warranted from the perspective of maintaining international competitiveness. This second measure is of particular importance for relatively

<sup>22</sup>Open unemployment is defined to include those who were looking for work and those who were available and willing to work.

**Figure 11. Productivity, Real Wages, and Wage Gaps**



Sources: Thai authorities; and IMF staff estimates.

open economies. Specifically, the issue is whether real wage movements helped to preserve—or even augment—international competitiveness in response to external shocks.

**Table 10. Output Gap and Unemployment**

	1973–80	1981–86	1987–93
Output gap (in percent of GDP)	1.4	-2.7	0.3
Unemployment (in percent of labor force)	...	2.0	0.8

Sources: Thai authorities; and IMF staff estimates.

**Table 11. Actual and "Warranted" Real Consumption Wages in the Manufacturing Sector**  
(Percent change unless otherwise noted)

	Productivity Growth	Unit Labor Costs in Partner Countries	Warranted Real Wages 1 <sup>1</sup>	Warranted Real Wages 2 <sup>2</sup>	Actual Real Wages	Wage Gap 1 <sup>3</sup>	Wage Gap 2 <sup>4</sup>
1975–80	9.3	9.7	8.2	10.0	1.3	–11.3	–10.9
1981–83	2.1	0.3	0.6	–0.8	3.1	–10.0	–3.2
1981	13.3	0.1	13.7	7.3	0.2	–19.4	–10.2
1982	–11.5	0.5	–15.1	–10.8	2.1	–6.3	–1.5
1983	4.4	0.4	3.2	1.1	6.9	–4.3	2.0
1984–86	0.7	4.9	3.9	8.8	7.3	1.2	4.0
1984	–0.3	–3.3	3.1	–1.7	8.0	–1.3	8.2
1985	–0.9	2.0	0.7	13.5	5.8	2.2	4.0
1986	3.4	16.1	7.9	14.5	8.2	2.7	—
1987–93	7.2	5.4	6.6	7.6	5.7	–2.1	–8.0

Sources: IMF, World Economic Outlook database; Thai authorities; and IMF staff estimates.

<sup>1</sup>Changes in warranted wage are given by changes in productivity plus the change in the price of output relative to the consumer price index.

<sup>2</sup>Changes in warranted wages are given by changes in productivity adjusted for changes in the real exchange rate and changes in unit labor costs in partner countries.

<sup>3</sup>Difference between an index of actual wages and one of warranted wages measured as in footnote 1. Indices are based in 1989.

<sup>4</sup>Difference between an index of actual wages and one of warranted wages measured as in footnote 2. Indices are based in 1989.

Two indicators—both quantifying the discrepancy ("wage gap") between the actual wage and estimates of the "warranted" real wage on the basis of the above two considerations—were used to evaluate the question. The first measure of warranted real wages was estimated under the assumption that labor's share in value added is constant, implying an unchanged level of employment over time.<sup>23</sup> The implication of assuming a constant wage share would be that the growth in real consumption wages—measured in terms of purchasing power over consumption goods—should correspond to productivity increases adjusted for changes in output prices relative to consumption prices.<sup>24</sup> The second measure of warranted wages was estimated by comparing the behavior of productivity and exchange

rates with that of unit labor costs in trading-partner countries.<sup>25</sup>

The evolution of real wages and labor productivity in the manufacturing sector is shown in Figure 11. Real wages declined moderately in the periods of the two oil price shocks, and productivity outpaced real wages for most of the 1970s. During the adjustment period (1980–86), however, real wage growth generally exceeded productivity growth. This development appears to be partly attributable to increases in public sector wages in the early 1980s. Since 1987, real wage growth has been more or less in line with productivity growth.

For the two measures of the wage gap, Table 11 presents the growth of actual and warranted wages on the basis of the two approaches, and Figure 11 plots the wage gaps. The wage gaps were calculated using 1989 as a base year—the potential output measures discussed earlier suggest that output was near capacity in 1989.<sup>26</sup> The magnitude of the wage gaps

<sup>23</sup>Bruno (1985) and Bruno and Sachs (1985) calculated wage gap measures by assuming that the underlying production technology is Cobb-Douglas in nature, with unitary elasticity of substitution between capital and labor. Under these assumptions, the issue of estimating the warranted wage is one of calculating average productivity at full employment. In contrast, the measure used here does not necessarily imply that the absence of a wage gap is appropriate from the point of view of full employment, only unchanged employment.

<sup>24</sup>The change in warranted wages is given by  $\Delta (W/P_c) = \Delta (\text{Productivity}) + \Delta (P_m/P_c)$ , where  $W$  is the nominal wage,  $P_c$  is the consumer price index, and  $P_m$  is the output deflator.

<sup>25</sup>It is given by

$$\Delta (W/P_c) \leq \Delta (ULC(\$)) + \Delta (\text{Productivity}) + \Delta (\text{Nominal exchange rate}) - \Delta (P_c).$$

<sup>26</sup>Wage gap measures can be strongly influenced by the choice of the base year; however, experiments with alternative base years were chosen in the postadjustment period and yielded similar measures of the wage gap.

was different using the two indicators, but the trends were similar.

In particular, during the late 1970s, actual wage growth was considerably below warranted wage growth, and wage gaps were substantially negative. During the first half of the adjustment period (1981–83), the wage gaps remained negative even as actual wage growth began to outpace that of warranted wages. By the second half of the adjustment period (1984–86), actual wage growth outstripped productivity growth by a wide margin, and wage gaps turned positive. The sustained real depreciation of the baht—owing to the nominal devaluation in late 1984, conservative financial policies and the continued depreciation of the U.S. dollar, and the pick-up in productivity growth beginning in 1986,

together with the rise in unit labor costs in trading partner countries—contributed to the reversal of these developments. Actual wage growth once again fell below that of warranted wages; wage gaps were negative during the entire postadjustment period.

The general conclusion of this analysis is that adjustment policies, together with the absence of systemic wage-price inertia, strong underlying productivity growth, and the track record of low inflation and inflationary expectations succeeded, albeit with some delay, in bringing about the necessary adjustment in real wages. In turn, this helped to contain the real costs of stabilization, in terms of a prolonged slowdown in output growth or an investment pause or both, and thereby set the stage for a rapid transition to a higher growth path.