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CHANGES IN THE STRUCTURE OF GDP VS.
CHANGES IN THE EMPLOYMENT PATTERN
IN LATIN AMERICA IN THE YEARS 1950 AND 1980

Changes in the structure of economy are usually expressed by two indicators. One of them is constituted by the shares of the particular sectors of economy in GDP and in the employment pattern. Comparison of shares of the particular sectors in GDP with the employment pattern shows their relative labour productivity, and comparison of changes taking place in two temporal profiles (1950 and 1980) demonstrates transformations taking place in the economic structure.

Shifts in employment pattern are much more rapid than those in the GDP structure, which is related to a rapid growth of population number, and therefore also of the labour force number.

Population of Latin America increased during the period 1950—1980 from 160,150 thousand to 340,904 thousand, that is 2.13 times. During the same period labour force increased from 54,681 thousand to 118,105 thousand, i.e. 2.16 times.

On the other hand, the value of gross product of Latin America (in 1975 prices) increased from 107.5 billion US dollars to 425.0 billion US dollars, that is, 3.95 times, in the years 1951/55 to 1976/80. In spite of such a great increase of the gross product value the changes in the shares of the particular sectors of economy have been much smaller than changes in employment pattern.

The highest differences between the growth of employment and the share in GDP within the 30-year period considered occurred in the service sector, which indicates low labour productivity of this sector. On the other hand, the least difference values characterized industry including mining which, in turn, confirms the stability of this sector, within which the significance of mining decreased, while the significance of manufacturing increased. In case of agriculture there has been an increase of productivity, as demonstrated by the employment

Table 1

Gross product and employment structure in Latin America (in per cent)

Country Sector of economy	Gross product			Employment pattern		
	1950	1980	1950—1980	1950	1980	1950—1980
Latin America						
Agriculture	20,8	11,2	—9,6	54,1	32,4	—21,7
Industry and mining	29,6	35,6	5,8	19,3	25,8	6,5
Services	49,4	53,2	3,8	26,6	41,8	15,2
Argentina						
Agriculture	15,6	10,3	—5,3	25,2	13,0	—12,2
Industry and mining	32,9	44,2	11,3	31,5	28,0	—2,5
Services	51,5	45,5	—6,0	43,3	59,0	13,7
Brazil						
Agriculture	29,0	13,0	—16,0	59,7	38,2	—22,5
Industry and mining	21,4	33,9	12,5	14,2	21,2	9,0
Services	49,6	53,1	3,5	26,1	40,6	14,5
Chile						
Agriculture	15,0	7,2	—7,8	32,6	18,4	—14,2
Industry and mining	26,4	37,3	10,9	30,8	19,2	—11,6
Services	58,6	55,5	—3,1	36,6	62,4	25,8
Columbia						
Agriculture	40,3	19,4	—20,9	56,8	27,4	—29,4
Industry and mining	17,9	31,6	13,7	18,8	20,6	1,8
Services	41,8	49,0	7,2	25,0	52,0	27,0
Mexico						
Agriculture	23,0	8,3	—14,7	61,2	36,0	—25,2
Industry and mining	30,0	36,9	6,9	16,7	26,0	9,3
Services	47,0	54,9	7,9	22,1	38,0	15,9
Peru						
Agriculture	35,0	8,5	—26,5	57,2	37,3	—19,9
Industry and mining	28,0	43,7	15,7	18,3	19,9	1,6
Services	41,0	47,8	6,8	24,5	42,8	18,3
Venezuela						
Agriculture	8,0	5,7	—2,3	45,8	18,0	—27,8
Industry and mining	47,0	44,3	—2,7	20,0	27,0	7,0
Services	45,0	50,0	5,0	34,2	55,0	20,8

Sources: Bolotin, B.M., Seinis, V.L., *Ekonomika razvivajuščichsja stran v cifrach* (Economy of developing countries in numbers), Moskva 1988; *Economic and Social Progress in Latin America*, Washington, years: 1979, 1980/81, 1983, 1984, 1985; *Progreso Economico y Social en America Latina*, Washington, years: 1986, 1987, 1988, 1989.

decrease, which is two times higher than the decrease of the share in GDP.

In order to better illustrate the regional differentiation an analysis was performed of employment and GDP patterns of 7 most important Latin American countries, giving over 90% of gross product and service value of this region, namely: Argentina, Chile, Columbia, Mexico, Peru and Venezuela.

In all these countries there occurred a decline of the share of agriculture in the employment pattern, as well as in the GDP pattern. In most countries there has also been an increase in the share of industry and service sectors both in the employment pattern and in GDP.

We can distinguish two groups among Latin American countries (see Table 1). In the first one, composed of Argentina, Chile and Venezuela, one can observe a decline of the shares of some non-agricultural sectors both in GDP and in employment patterns. The second group is composed of Brazil, Columbia, Mexico and Peru, where there occurred a decrease in the share of agriculture and the increase of shares of non-agricultural sectors, in the gross product and employment pattern.

In Argentina, there has been an increase of the share of industry in gross product of economy, coupled with decrease of the share of this sector of economy in the employment pattern. The situation is different in case of services, where there has been an increase of the share in the employment pattern and, simultaneously, a decrease of the share in the gross product. This phenomenon was caused by the modernization of industrial production in the years 1950—1980, concerning branches employing smaller number of persons, such as oil and gas production, development of great hydropower projects such as Chacon-Cerros, Colorados, Yacireta or finally — development of electronic industry. There was a decrease of the share of traditional industries, such as food processing and textiles. On the other hand, an increase of employment in service, coupled with the decrease of the share of this sector of economy in GDP value indicates a lower productivity of this sector. There was a high share of expenses related to the military sector, in view of the fact that the military have been at power during most of the 30-year period.

In Chile, after the nationalization of a majority of enterprises during the government of Salvador Allende, there was a modernization of industrial production, which explains the decrease of employment coupled with the increase of gross product. An increase of employment

in service combined with the decline of the share of this sector in GDP is related to military expenditure, especially after the coup d'état of A. Pinochet.

Venezuela, a dynamically developing country was characterized in the years 1950—1980 by an important decrease of the share of employment in agriculture, while the decrease in the share in GDP was rather small. This was largely caused by progressing mechanization of agriculture. Thus, in the years 1961/65 there was 1 tractor per 200 hectares, while in 1983 there was already 1 tractor per 94 hectares in Venezuela. In industrial production there was a slight increase in the share in employment structure, while there was a small decrease in the share in GDP. Such a situation was caused by a significant share of mining production in the industrial structure, which recently has undergone a decrease due to a decline in oil production. At the same time there was an increase of manufacturing industry production, requiring higher employment. A significant share of the state-owned industries, which accounted in 1981 for 66.6% of the gross product income and for 67.9% of its expenses, had a definite influence on changes in industrial structure. The state controls oil production, gas production, extraction of iron ores as well as production of cement, aluminum and petrochemicals. These branches play the decisive role in the economy of Venezuela. Hence, high demand for service, generated by population acquiring high incomes in these branches of industrial economy.

Brazil, the greatest country, exerts a great influence upon the economy of Latin America (it accounted for 36.7% of GDP value of this region of the world in 1987/88). An increase of the shares of industry both in employment pattern and in GDP resulted from intensive industrialization, carried out especially during the period of the "Brazilian miracle". A higher increase of the share of industry in GDP than in employment demonstrates an increase of relative productivity of the sector. The main industrial investment projects were great hydro-power stations of Urubupunga, Ilha Solteira, Furnas, Três Marias, Xavantes, Itaipu and others, as well as petrochemical plants and steelworks. Besides, the policy of developing Amazonia was carried out, as well as the policy aimed at the improvement of economic situation of the North-East. A high increase of the share of service in employment and low in GDP indicates a low labour productivity of this sector of economy.

Columbia was characterized by the greatest drop of the share of agriculture both in employment pattern and in the GDP pattern. This was caused by the low degree of mechanization of agriculture, by the improper agrarian structure as well as a high migration from rural areas to towns. A high increase of the shares of industrial production was the effect of the industrialization policy, oriented mainly at chemical, petrochemical, metal and cement industries. A significant increase of employment in the service sector, coupled with a small increase of the share of this sector in GDP value, demonstrates a relatively lower productivity within the service sector.

In Mexico, the dynamically developing country in the years 1950—1980, there occurred an increase of importance of mining production, especially of oil and gas production, as well as manufacturing industry, mainly petrochemical, metal and machine industries. This effect occurred mainly due to private investment, which plays more important role in this country than the state ones. A high share of services especially in GDP is the effect of infrastructural, and in particular transport- and communication-related investment.

There was a relatively small increase of employment in industry in Peru, while the share of this sector of economy in gross product grew quicker. This resulted from high importance of colour metals mining, as well as oil and gas production. The state sector provided in 1981 as much as 48.6% of income and accounted for 56.8% of expenses of the gross product. This ownership sector was controlling mining, metalworks, electricity generation and shipyards. The insignificant increase of the share of services in gross product, coupled with the higher increase in the employment pattern reflects a relatively low productivity of this sector of economy. Thus, in 1980 Peru earmarked only 15.4% of its state budget for social service, which is the lowest index among the 7 countries analysed.

Summing up, one should emphasize regional differences, resulting from economic specificity ownership pattern (i.e. the shares of the state and the private sectors), existing social and industrial infrastructure the rates of growth of labour force and of income per capita. Countries with the highest income per capita (that is Venezuela, Argentina and Chile) are characterized by the lowest values of changes in the pattern of gross product, while countries with the highest natural increase (Venezuela, Columbia, Brazil and Mexico) are characterized by the biggest changes in the employment pattern. The shares of the state and private ownership sectors influence mainly the share of industry, and especially the accomplishment of investment projects, both of countrywide and local significance.

Growing tendencies in changes of employment pattern as well as GDP pattern are the result of transformation of Latin America from an agricultural and mineral raw material region to an industrial-agricultural region with a high share of the service sector.