



INTERNATIONAL
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PRO-POOR GROWTH IN TUNISIA

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EXECUTIVE SUMMARY

The review of the Tunisian growth-poverty reduction experience clearly shows that growth has been consistently pro-poor. The poverty headcount index declined sharply for the whole country from over 20 percent in 1980 to about 4 percent in 2000. In rural Tunisia where poverty is still largely concentrated, the headcount dropped from over 30 percent to slightly over 8 percent between the same years. In two decades Tunisia succeeded in cutting the overall poverty rate by about 80 percent and the absolute number of the poor from about 1.2 million poor inhabitants in 1980 to less than 400 000 inhabitants in 2000.

Growth has also been relatively high, averaging 5.3 percent in terms of total GDP and 3.2 percent in per capita terms over the period 1962-2000. In the two decades of the eighties and nineties total GDP rose at over 4 percent per year and per capita GDP growth averaged 2 percent. This performance doesn't match that achieved by East-Asian countries but certainly places Tunisia above the average growth performance recorded in developing countries.

The analysis in terms of growth incidence curves and pro-poor growth rates shows that growth benefited to almost all the percentiles of the population, particularly to the low percentiles whose real consumption expenditures grew at much higher rates than for the other percentiles. Thus, the incidence of poverty has unequivocally dropped, whether we take the absolute or the relative definition of poverty.

Growth has made the major contribution to poverty reduction as opposed to redistribution. The decomposition of changes in poverty incidence over the period 1980-00 following the Datt-Ravallion method reveals indeed that growth accounts for the bulk of changes in poverty in the whole country, with the exception of the second half of the eighties during which the reduction in inequality also played a significant role. Rural poverty is much more sensitive to growth in agricultural output than to aggregate GDP.

There has been hardly any improvements in the land endowments of the rural poor or low-income farmers. An ill-conceived land reform was attempted in the sixties but quickly abandoned because it was closer to a collectivization policy than to a land reform targeting the poor. Land distribution is practically the same today as it was in the early sixties, with more than two thirds of the farmers owning about 10% of total farm land against 22 percent for the 1.2% richest farmers.

Agricultural value-added increased at close to 4 percent per year over the period 1980-2000, even though total cultivated area remained more or less constant. Several factors account for this significant growth: mechanization, larger use of fertilizers and other chemical inputs, expansion of irrigation, development of livestock, government investment subsidies and improvements in management and in efficiency which have been carried out by increasingly educated and market-oriented large farmers. To what extent have small farmers taken part in these improvements is not clear for lack of data on changes in productivity by farm size. Small farmers cultivating rainfed crops have probably benefited very little from this growth, although there is some evidence that they too have increased their use of mechanization and chemicals. The revenue they derive from their landholdings depends as

ever on wide fluctuations in rainfall. In contrast, those with access to irrigation have switched from low yield crops such as cereals to higher value-added vegetables and fruits and have significantly increased their income.

Moreover, many small farmers have acquired livestock, using their own savings, remittances from relatives or government financial or in kind subsidies. Tunisia's increase in meat and especially in dairy production has been significant, which led to almost self-sufficiency by the end of the nineties against a high degree of dependency on imports as late as the mid-eighties. There is evidence that the number of small cattle raisers is very high and that their holdings, which account for a very large share of total livestock, made significant contribution to their income.

Regardless of the degree of participation of small landowners in the development of agriculture, the combination of the slowdown in population growth and rural migration has certainly improved the standards of living of low-income farmers and contributed to poverty alleviation. High population growth is generally associated with high dependency ratios and poverty incidence since the same income earned by adults will have to be shared with a larger number of children. As population growth slows down, per capita income rises even if total farm's income increases only moderately. This study provides some empirical evidence to that effect. The slowdown in population growth reduced dependency ratios across the whole population distribution, but in much greater proportions for the first two deciles than for the other deciles and particularly for the first decile to which the poor belonged in 2000. Since most of those who pulled themselves out of poverty between 1980 and 2000 probably moved to the second decile, the much sharper reduction in their dependency than among the poor is an indication of the beneficial effects of the slowdown in population growth on poverty reduction.

Primary education is not enough to be pulled out of poverty. Major progress has been made in Tunisia in the area of education. Enrollment ratios have significantly increased for both males and females. Primary education covered the whole eligible population by the early nineties and secondary enrollment sharply increased. However, the return to primary education is very low in absolute terms and in comparison with the return to secondary education. In 2000 the proportions of primary education are almost the same for the first decile than for the whole population, against a fourfold differential in secondary education. In rural areas, while the proportions of primary education and enrollment rates are about the same across deciles, those of secondary education are much lower for the lower than for the higher deciles.

The labor market played an important role in connecting the poor to growth. Agriculture hardly created any new jobs over decades while minimum agricultural wages increased only moderately in real terms over the period 1980-2000, averaging 0.5 percent per year. However, small farmers have been engaged in activities other than agriculture, 50 percent of those holding less than five ha are employed in sectors such as construction, the food industry and services.

At the national level the sectoral composition of employment has radically changed in favor of labor-intensive and export-oriented manufacturing. The share of agriculture has been halved, declining from almost 46 percent of total employment in the sixties to 23 percent in the second half of the nineties. Manufacturing saw its share rise by almost ten points between the same periods, from about 14 to 24 percent, and textile and clothing account today for half

of manufacturing employment. Construction and clothing, which are much more intensive in low-skilled labor than other sectors outside of agriculture, account together for more than one fifth of total employment. Tourism is another sector where the employment of relatively low-skilled labor increased at a rapid pace. The growth of these activities has increased job opportunities for low-income workers, many of whom coming from rural areas, and thus contributed to the reduction of poverty, even if unemployment remains relatively high, hovering around 15 percent of the active population.

The development strategy put in place in the early seventies relied on financial and fiscal incentives to attract foreign and domestic capital to export-oriented light industries. This strategy paid off in terms of both growth, job creation and poverty alleviation, even though the strong concentration in garment entails today high risks of loss of market shares as a result of the dismantling of the Multi-Fiber Agreement. Like most developing countries, Tunisia pursued for a long time and even as late as the early nineties a policy of import substitution but also avoided early on the anti-export bias by providing significant fiscal and financial incentives to exporting firms.

Growth certainly made the major contribution to the rise in incomes and poverty reduction, but social policy and the government commitment to fighting poverty have also played an important role. Numerous social programs targeted the poor since the mid-seventies but more so since the early nineties. Rural roads have played a particularly important role in helping the rural poor connect to urban goods and labor markets and to urban services and to generally improve their living conditions. Although no estimates of the returns to this infrastructure are available, there is a presumption that they are very high and that rural roads have induced significant cuts in the transaction costs of the rural poor. The housing component of these programs has not only improved the living conditions of the poor but also freed up income and saving that would have been spent on housing to spend on other food and non-food items with the resulting positive effects on poverty alleviation. Food subsidies, although lacking targeting, have also reduced prices of basic food for the urban poor. Overall, the social policy has been an important instrument, which has accompanied growth - but also financed by the latter - in reducing poverty.

I- INTRODUCTION

Over the last four decades Tunisia has achieved relatively high growth and a significant reduction in the incidence of poverty. Even though poverty is still highly concentrated in rural areas and in certain regions of the country, particularly in the Center-west, growth has been on the whole consistently pro-poor. The growth strategy has helped the poor to participate in the growth process mainly through the labor market while appropriate social policies have been effective in reducing poverty. A combination of growth strategy, based essentially on the development of labor-intensive and export-oriented manufacturing, active female participation in the labor market and of pro-poor social policies accounts for these outcomes.

Political commitment has also been important. Fighting poverty has been one of the main objectives targeted by the regime in power since the early sixties. The political leadership that led the struggle for independence was issued from the petite bourgeoisie and was free from any strong influence of local landlords or private industrialists. During that struggle the political base originated in small towns and villages rather than in big cities, which may explain why the political leadership pursued early on policies fostering the interests of the poor. The commitment of leadership to fighting poverty is crucial as several other countries equaled Tunisia's growth performance or even outperformed it and yet have much higher poverty incidence than Tunisia has today.

Since initial income was very low, any redistribution without growth would not have made a dent in poverty reduction. Growth has been essential in providing job opportunities for the poor and the state with the resources needed for social spending. The development of export-oriented light labor-intensive manufacturing and services, particularly tourism in the coastal regions of the country has played an important role in accelerating growth and increasing the employment of low to middle-skilled workers, mainly female workers, many of whom came from neighboring rural areas.

External migration also helped reduce poverty through two channels, reducing pressure on the local job market, leaving behind opportunities for the remaining active population, including the poor, and through remittances, which are partly used by relatives, many of whom were poor. In Tunisia remittances from abroad have been significant, at times reaching close to 5% of GDP.

The purpose of the following analysis is to show the extent to which growth has been pro-poor in Tunisia and to identify the factors and policies underlying this outcome. The paper also tries to sort out the role played by social spending. It is structured as follows. Section II reviews the historical context and growth and poverty trends. Section III deals with the analysis of growth and its poverty and distributional impact. In section IV we review the factors affecting the participation of poor people in growth and in section V we discuss the trade-offs between growth and poverty reduction. Section VI brings out policy lessons.

II- HISTORICAL CONTEXT AND GROWTH AND POVERTY TRENDS

At independence in 1956 Tunisia was a poor country with a low income per capita and where poverty and illiteracy were widespread. A political leadership that developed deep popular roots over more than two decades before independence led the struggle for independence. During that struggle it drew its support from villages and the population at large, rather than from the land aristocracy or industrial bourgeoisie. This historical background gave rise to a political agenda that stressed social as well as economic development.

II-1- Initial conditions

At the beginning of the sixties the Tunisian population was basically illiterate and had a very low standard of living. The average education endowment was 0.6 years in 1960, which was very low by international standards. Ten years later more than 72% of all adult population and 85% of the female population were still illiterate. Poverty incidence was also high, estimated at 33% in 1966-67 according to the first National Household Consumption Expenditure Survey conducted after independence, and had been much higher in previous years.

Agriculture was the dominant activity but most of the fertile land was in the hands of French large farmers until 1964. There was very little industry, and tourism, which later became an important activity, was almost non-existent. Shortly after independence, most French civil servants returned to France, leaving a civil service vacuum that needed to be filled. Given the scarcity of trained and experienced national civil servants, this departure compounded the difficulties of running the country's affairs.

In the first years after independence, the priority of the new government was to rebuild the institutions and the civil service and to fill the vacuum left by the departure of the French. At that time a new development strategy was developed not by the political regime in place, but by the labor union, "UGTT" (Union Générale des Travailleurs Tunisiens), which had been a full partner of the political movement in the struggle for independence but which became a quasi-opposition party in the first years of independence. This strategy, which was endorsed by the government at the beginning of the sixties, emphasized planning and the need for an economic development based on the coexistence of three sectors, the public, the cooperative and the private sectors. It also stressed major dimensions of human development: education, family planning and birth control, women's rights and the "eradication" of poverty. Regarding women's rights a new comprehensive law was enacted as early as 1956, introducing major revolutionary reforms by Moslem countries standards. These social concerns have remained high priorities in government policy and public discourse ever since.

II-2- Growth performance in Tunisia

Tunisia achieved a good growth performance, averaging 5.3% and 3.2% respectively for total and per capita GDP over the period 1962-2000. Growth has not however been steady, varying across sub-periods due to major shifts in economic policy and to exogenous international shocks as well. The two oil shocks of the seventies were favorable, Tunisia being a net small exporter of oil during that period. Growth also fluctuated within sub-periods, due essentially to changes in weather conditions which alternated between years of good or average rainfall and years of drought, resulting in high variability of agricultural output. For example, the

persistence of drought in the period 1990-95 accounts for the increase in poverty in rural areas recorded for that period.

In the seventies growth was high, per capita GDP rising annually at 4.8%, driven by the sharp rise in oil prices and the development of FDI-based light manufacturing. The state provided important fiscal incentives to the export sector as well as large financial subsidies and preferential access to credit for SMEs. In contrast, the first half of the eighties witnessed a significant slowdown in growth in spite of large investments. GDP growth dropped from the high level of the 70s, which was the golden decade, to an average of 3.7% during the period 1980-85. Inefficiency, poor macroeconomic management and political instability due to infighting for succession to an ailing and aging president were the most important factors accounting for this slowdown. The result was a significant deceleration in the rise of per capita GDP.

Then followed a period of macroeconomic stabilization and structural reforms. In contrast to the experience of many other developing countries, the short-run cost of stabilization and structural adjustment was relatively small, a decline in growth from an average of 3.7% in the first half of the eighties to 3% per annum during the adjustment period 1985-90. In the following five years the economy began to recover but a succession of drought years resulted in a sharp decline in agricultural output, by a third in the years 1993-95. Still per capita GDP rose by about 1.2% per annum between 1990 and 1995. The economy picked up speed in the second half of the nineties, spurred by exports, which resulted in the highest growth in per capita GDP since the seventies, running at an average of 4.2% per annum. Over the whole period on which poverty analysis is particularly focused in this paper, 1980-2000, per capita GDP grew at the average rate of 2% per year.

II-3-Poverty and inequality trends in Tunisia (1980-2000)

Poverty steadily declined from high rates in the sixties to very low rates by the year 2000. Comparisons across surveys should be handled with care, given differences in the quality of household expenditures surveys, but available information shows that absolute poverty declined roughly from over a third of the population in the mid-sixties to about 4% in the year 2000. There have been periods in which poverty incidence increased but these trends were reversed along with the acceleration of growth.

The extent of poverty, its regional incidence and changes in its incidence overtime depend on the definition of the poverty line. In the Tunisian case, it turns out that depending on how the poverty lines are defined for urban and rural areas, poverty can be seen essentially as an urban or rural phenomenon and the policy implications will vary accordingly. In the empirical literature on poverty two alternative approaches have been used in the measurement of poverty lines, the official approach defined by the National Statistical Institute "INS" and the World Bank approach which has been recommended and used since 1995 in reports on poverty in Tunisia. Poverty is essentially an urban phenomenon according to the national approach and a rural phenomenon when the World Bank methodology is used.

The two approaches use the same definition of basic nutritional caloric needs in physical terms but differ in the estimation of the food poverty lines and the associated non-food expenditures for rural and urban areas. INS defined poverty lines for the first time in 1980 on the basis of basic nutritional caloric needs. The unit value of these needs is based on the

composition of consumption of the first quintile of the total population, which is chosen as the reference group for the poor. The nutritional value at the poverty line is then calculated as the product of this unit value and the poverty quantity of calories while the total poverty line is estimated by dividing the poverty food line by the share of food in the total expenditures of the reference group. This approach, which is applied separately for the urban and rural areas, yields a poverty line twice as high for urban as for rural areas. Using this ratio between the two core poverty lines for all subsequent surveys, including the latest one held in 2000, INS has estimated the nominal poverty line respectively for urban and rural areas by adjusting the 1980 values by the same consumer price index.

INS approach is criticized for two reasons associated with the choice of the reference group¹. First, the estimated unit value of food turns out to be much higher for the urban reference group than for the rural one, 70% higher in metropolitan than in rural areas. It is hard to think of reasons why differences in food prices between the two areas would be that high. Secondly, the share of non-food consumption is higher for the reference group in urban than in rural areas. These two biases result in overestimating the poverty line in urban as opposed to rural areas.

The World Bank approach adjusts INS estimates in two ways. The reference group is chosen as the group around the poverty line as defined by INS for the year 1990. Calorie unit values and food poverty lines are estimated for the two areas on that basis, which yields a difference of only 18% between urban and rural areas, against more than 60% in the INS approach. The second adjustment, which involves the non-food share, consists deriving the latter from an econometrically estimated Engel equation². This method gives a smaller non-food share in urban areas and a higher share in rural areas than the INS method, which also lowers the overall poverty line in the former areas and increases it in the latter.

The differences between the two approaches turn out to be very large. The urban poverty line is twice as high for the urban than for the rural areas according to the INS approach while it is only 18% higher according to the WB approach (Table-1). Because of these differences opposite conclusions are reached concerning the regional concentration of poverty. According to INS the headcount index is much higher in urban than in rural areas, except in 1980, whereas the World Bank reaches the opposite conclusion for all survey years.

In our analysis we adopt the WB approach because it makes the more reasonable assumption of estimating the unit value of food consumption by reference to a household group having a level of expenditures around the poverty line. Considering the whole first quintile as a reference group, which is the INS approach, clearly results in overestimating the food unit value for the poor.

¹ The WB approach was put forward in a report submitted by a mission conducted in 1995 which included M. Ravallion (Republic of Tunisia, Poverty Alleviation, Preserving Progress while Preparing for the Future, Report n° 13993-TUN, World Bank 1995).

² In this model the share of food is regressed on the ratio of total expenditures to the food poverty line (in log), this same ratio squared and on the difference in size between each household and the average household of the reference group. This equation is estimated separately for the two areas. The estimated constant of the model represents the food share of the household having an income just equal to the food poverty line. The non food poverty line will be equal to $(1-\alpha)zF$. The lower poverty line will therefore be $z = zF + zNF = (2-\alpha)zF$.

Table 1- Poverty lines in Tunisia (1990)

	Unit value (rural=100)		Food Poverty line (in TD)		Food share		Poverty line (in TD) (Rural=100)			
	INS	WB	INS	WB	INS	WB	INS	WB ⁽¹⁾	INS	WB
Urban	163	118	150	160	0,54	0,55	278	218	200	118
Rural	100	100	89	134	0,64	0,61	139	185	100	100

(1) In 1990 the exchange rate was 0.878 TD to the US\$. This implies a WB poverty line of US\$ 248 for the urban areas and US\$ 210 for rural areas. With adjustment forward at the consumer price index up to 2000 these lines are estimated at 341 TD and 294 TD respectively for the two areas. In terms of PPP US\$ these amounts correspond respectively to about US\$ 2 and US\$ 1.8 per capita per day. The upper poverty lines are respectively US\$ 2.9 and US\$ 2.3 for the year 2000 (PPP 1993).

Trends in poverty incidence³:

Core poverty has dropped dramatically since 1980 both in rural and urban areas. The overall headcount rate declined from 20.1 percent in 1980 to 4.1 percent in 2000. It became insignificant in urban areas, declining to 1.7 percent of total population, and dropped sharply in rural areas from over 30 percent in 1980 to 8.3 percent in 2000 (Table-2). This is a very important social achievement even if rural poverty remains sensitive to fluctuations in agricultural production, such as between 1990 and 1995 when the HC index continued its decline in urban Tunisia while rising in rural areas as a result of three consecutive years of severe drought and of a drop in production of almost 25% during the years 1993-95.

Trends also point downward if poverty incidence is assessed on the basis of an upper poverty line that includes both the poor as defined by the lower poverty line and the vulnerable defined as those having the same food expenditures as the core poor but somewhat higher expenditures on non-food.

Poverty incidence has been consistently a rural phenomenon according to the WB approach, in contrast with INS assessment. The differences between the two approaches are very significant. According to INS the HC dropped in rural areas from over 14% in 1980 to 2.9% in 2000 and declined in smaller proportions in urban areas, to 4.9% in 2000 (Table-2). The alternative World Bank approach, which we follow in the present analysis, shows much higher poverty incidence in rural than in urban areas. The rural share of the total poor population varied between 65% and 82% over the period 1980-2000 and accounted for three-

3 The base year is 1990 for which the WB gives the poverty lines separately for the rural and urban areas. For the other years the food and non food poverty lines are estimated by deflating or inflating the 1990 lines backward or forward using the food and non food consumer price indices.

fourths of this in the latest survey of 2000. However, the number of the poor declined in both areas.

Table 2- Poverty incidence and growth in Tunisia⁴
(Headcount for the lower poverty line 1980-2000)

	Lower					Upper				
	1980	1985	1990	1995	2000	1980	1985	1990	1995	2000
World Bank method										
Total	20.1	9.6	6.7	8.1	4.1	29.9	19.9	14.1	17.1	9.9
Urban	7.7	4.0	3.0	3.2	1.7	18.7	12.0	8.9	10.1	6.2
Rural	30.1	17.2	12.7	15.8	8.3	38.9	29.2	21.6	28.1	16.1
INS method										
Total	12.9	7.7	6.7	6.2	4.2	-	-	-	-	-
Urban	11.8	8.4	7.3	7.1	4.9	-	-	-	-	-
Rural	14.1	7.0	5.7	4.9	2.9	-	-	-	-	-

Sources: 1980, 1985 and 1990: Authors' estimates based on survey micro data
1995, 2000: WB (2003)

Surveys (Number of households)
1980: 5944 (Urban: 2658, Rural: 3286)
1985: 7454 (U: 4171, R: 3283)
1990: 7734 (U: 4477, R:3257)
1995: 10 000
2000: 12960

Poverty remained also highly concentrated in two regions, the North-west (NW) and the Center-west (CW), although the last survey of the year 2000 shows a dramatic decline in poverty in the NW. In 1980 the headcount index was over 30 percent and almost 34 percent respectively in these two regions, against 20 percent for the whole country (Table-3). Almost 30% of the country's poor lived in the NW and 28% in the CW. In contrast, the Metropolitan

⁴ The table reports for 1995 and 2000 the headcount ratios recorded in the World Bank Poverty Update (2003). These figures are slightly different than those we use in the decomposition of changes in the headcount in the growth and inequality effects and which the authors estimated on the basis of the survey data.

area of Tunis had the lowest poverty incidence with a headcount of only 4.3 percent. Since 1980 the incidence of poverty has declined in all regions but in much greater proportions in the NW than in the CW. In the NW it has even dropped to below the national level, to 3.7% against 4.1% nationwide, while in the CW it dropped to about 11%, which is still more than two and half times higher than the national level. It is also interesting to notice that the South-west has not made any gain since 1985. These regional trends are also recorded for poverty incidence based on the upper poverty level.

Table 3- Poverty incidence in Tunisia
(Regional Headcount, 1980-2000)

	1980	1985	1990	1995	2000
Greater Tunis	4.3	2.3	2.1	2.4	1
North East	15.6	8.9	5.9	6.3	3.5
North West	30.1	17.9	14.3	11.1	3.7
Center West	33.8	18	12.5	20	10.8
Center East	16.5	6.2	3.9	3.5	1.9
South West	13	6.7	8.8	8.2	6.4
South East	15.7	12.1	3.1	10.5	6
All Tunisia	20.1	9.6	6.7	8.1	4.1

Sources: HCS

Trends in inequality:

Inequality showed little variation during the period 1980-2000, except in the second half of the eighties. The Gini coefficient of the distribution of household expenditures remained stable between 1980 and 1985, then declined in 1990 by about 10% and remained more or less at that level throughout the nineties (Table-4). The highest percentile measures show more or less the same degree of stability in the distribution of consumption in the 1990s. The sharp decline in inequality, which may be relevant for the analysis of poverty reduction, occurred in the second half of the eighties, which was interestingly a period of macroeconomic stabilization and structural adjustment.

Table 4- Trends in inequality (1980-2000)

	1980	1985	1990	1995	2000
GINI COEFFICIENT					
Total	0.455	0.453	0.401	0.417	0.409
Urban	0.418	0.432	0.374	0.389	0.391
Rural	0.412	0.379	0.354	0.353	0.358
HIGHEST QUINTILE					
(Total)	-	-	46.5	47.9	47.3
HIGHEST DECILE					
(Total)	-	-	30.5	31.7	31.5
LOWEST QUINTILE					
LOWEST DECILE					

Sources: Authors' estimates for 1980, 85 and 90 and Republic of Tunisia, Poverty Update,

II-4- General relationship between growth, poverty and inequality

Changes in the incidence of poverty, growth and inequality during the period 1980-2000 are summarized in table 5. The sub-periods differ in economic policies and the growth-poverty outcome.

1980-85: This period witnessed a sharp slowdown in growth compared to the seventies. GDP grew at 3.7% per annum, against more than 7% throughout the seventies. This low performance was due to poor economic management and inefficient investment projects undertaken by the public sector. However, agricultural value-added rose by over 7% per year and in 1985, which was a HCS year, it was about 20% above its trend value (Figure-1). During the same period poverty dropped sharply and household real consumption rose at the high rate of 5% per annum. In spite of low growth, the government raised salaries, including minimum wages for farm workers at unprecedented rates. At the same time, food subsidies were maintained at record levels, representing about 4% of GDP. Combined with large public investment, the increases in salaries and record food subsidies resulted in a sharp rise in inflation and in the public and current account deficits, the latter reaching nearly 5% and 7% respectively in terms of GDP. Along with favorable conditions in agriculture, the availability of external resources enabled the government to raise income and reduce poverty in a period of slow growth. Overall, the degree of inequality remained the same during this period, although the distribution of consumption became less unequal in rural areas and slightly more skewed in urban areas.

1985-90: This period overlaps with the program of stabilization and structural adjustment which started in mid-1986 and lasted through 1993. The incidence of poverty continued its sharp decline, particularly in rural Tunisia where it dropped by as much as 4.5 points. At the same time, adjustment following the macroeconomic disequilibria of the first half of the eighties induced a sharp decline in investment, although the ensuing slowdown in growth was relatively moderate, from 3.7% in 1980-85 to 3.0% per annum in the period 1985-90. Per capita GDP grew by a mere 0.6% on the average. However, agricultural value-added rose at the rate of 3.8% and was in 1990 slightly above its trend value. Overall, there was in this period a sharp decline in inequality as measured by the Gini coefficient which dropped from about 0.45 to 0.40.

1990-95: Urban poverty changed very little whereas the headcount of rural poverty increased for the first time since 1980, by over three points. GDP grew faster than in the previous period, resulting in an average increase at 2% in per capita terms while agricultural output declined due to three consecutive years of drought, to almost 20% below its trend value in 1995. This poor performance is the main factor accounting for the increase in the incidence of rural poverty. The degree of inequality remained the same during this period.

1995-2000: Poverty dropped in large proportions in rural areas at the same time as growth accelerated at its fastest pace since the end of the seventies, with per capita GDP growing at 4.2% per annum. Agricultural output was above its trend value and inequality didn't change during this period.

Figure 1- Changes in agricultural value-added in Tunisia (1962-2000)

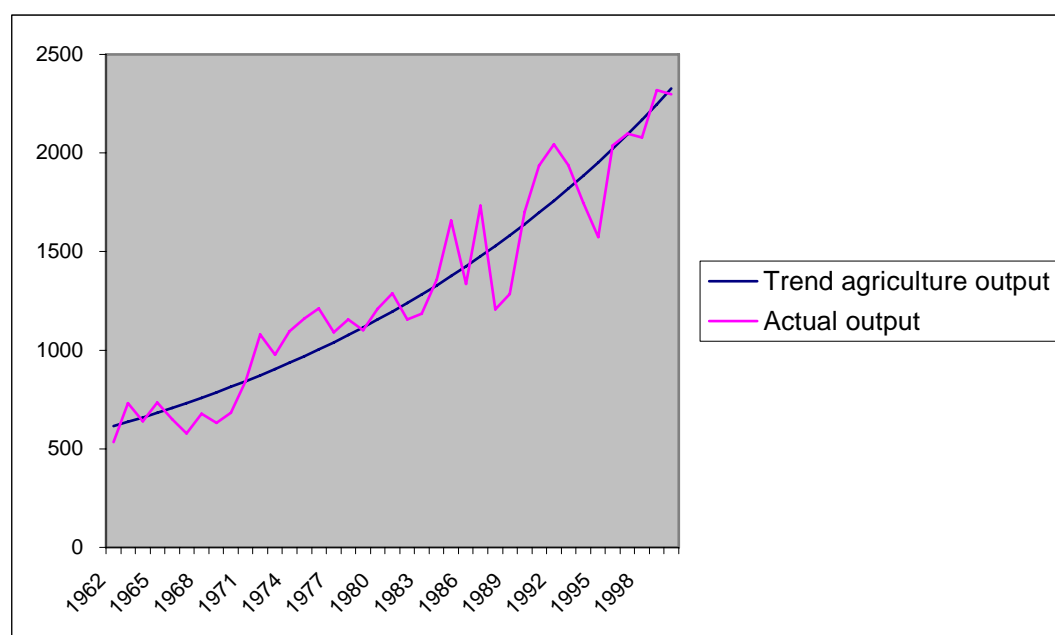


Table 5- Summary Table on Growth and inequality (Growth rates in %)

	1980-85	1985-90	1990-95	1995-2000	1980-00
1. Changes in the headcount index ⁽¹⁾					
In percentage points (Core poverty):					
Whole country	-10.5	-2.9	1.4	-4	-16
Urban	-3.7	-1	0.2	-1.5	-6
Rural	-12.9	-4.5	3.1	-7.5	-21.8
2. Annual Growth in average					
Real consumption expenditures/capita					
(in %):					
Total	5.5	0.3	0.7	3.4	2.5
Urban	4.9	-0.7	0.9	2.7	1.9
Rural	5.0	1.0	-0.6	5.1	2.6
3. Inequality	Stable	Decline	Stable	Stable	Decline
4. GDP growth (annual rates in %)					
Total GDP growth	3.7	3.0	3.9	5.6	4.1
Growth of agricultural value-added	7.1	3.8	-1.1	8.3	4.5
Growth in Manufacturing value-added	7.9	5.2	5.7	5.3	6.0
Textile, clothing and leather products	9.2	7.1	7.7	4.6	7.2
Growth in per capita GDP	1.1	0.6	2.0	4.2	2.0

(1): The figures for 1995 and 2000 are somewhat different from those used in the Datt-Ravallion decomposition. For the latter the estimates are directly based on the HCS data.

Source: Calculations based on HCSs and National Accounts

III- ANALYSIS OF GROWTH AND ITS POVERTY AND DISTRIBUTIONAL IMPACT

III-1- Growth, sources and drivers

The sixties were years of policy experimentation: agricultural cooperatives, socialism and state-led import substitution. Given this context one would have expected low growth and little productivity gains. In fact productivity gains were significant while the growth of employment was disappointing. Agriculture grew very little, at 1.8% per year with a decline in TFP, but industrial development was intense: non-food manufacturing value-added grew at 17.6% and non-manufacturing industry grew at over 22% annually. The state led this industrialization while the private sector played only a minor role. In the seventies growth accelerated, fuelled by windfall oil revenues, the development of private manufacturing and tourism. Capital accumulation continued to be important but labor and productivity gains played a much more important role than in previous periods. Light manufacturing and tourism grew at impressive rates, exceeding 13% per annum on the average. Thus, the development of the private sector and oil windfalls were the main growth drivers during this period. The Tunisian economy experienced a slowdown in the following period, 1981-86, with the lowest growth performance recorded since independence and a decline in productivity (at 1.5% per year). Economic mismanagement and political instability were the main factors behind this poor performance. Over a long period of four decades since the sixties, the Tunisian economy grew at an annual rate exceeding 5% per year (5.5%). Growth was the fastest in the seventies and the lowest in the period 1981-86.

Growth decomposition shows that roughly 42% of growth came from capital accumulation, 27% from labor and 32% was due to productivity gains during the long period of 1962-2000 (Tables 6 and 7). However, while capital accumulation was by far the main source of growth in the sixties (almost 60%) and employment contributed very little to growth (about 10%), the contribution of capital steadily declined in later periods and reached 21% in the nineties. Labor and productivity gains became more significant sources of growth in the eighties and the nineties.

Employment expanded at a very low rate in the sixties, averaging 1.1% per year. Investment went into capital intensive public projects such as a steel mill, an oil refinery, a paper plant, a couple of large textile factories and an automobile assembly plant. Such projects absorbed a large share of investment resources but created only a few jobs, which explains why employment creation was so low during this period and why the growth of the capital stock was the main source of growth, accounting for almost 60% of growth in this period. With the reorientation of industrial policy towards light industries which were increasingly developed by the private sector, job creation accelerated to an average of 2.6% in the following three decades, with the exception of the second half of the eighties during which a program of stabilization and structural adjustment was implemented. Even though job creation has not been sufficient to reduce the rate of unemployment which persisted around 15% of the active labor force since the late eighties, the change in development strategy that took place in the early seventies was crucial for growth and poverty reduction.

Investment averaged 25% of GDP during the period 1962-2000, which is a relatively high rate compared to the average for developing countries. However, it was highly unstable, rising from about 25% in the seventies to over 30% in the first half of the eighties, then declining to 22% in the adjustment period that followed (1986-90) and rising again to an average of 25.5% in the nineties. TFP growth accounted for roughly a third of GDP growth (including the contribution of human capital) over the four decades and for about one quarter of growth during the period 1980-2000.

Table 6- Growth Performance (1962-2000)

PERIOD	GROWTH OF GDP	GROWTH OF CAPITAL STOCK	GROWTH OF EMPLOYMENT	TFP GROWTH	GROWTH IN PER CAPITA GDP
1962-69	6.2	10.4	1.1	1.8	4.1
1970-80	7.0	7.7	2.6	2.8	4.8
1980-85	3.7	8.1	2.6	-0.8	1.1
1985-90	3.0	2.4	2.1	0.8	0.6
1990-95	3.9	3.1	2.5	1.2	2.0
1995-00	5.6	3.1	2.6	2.9	4.2
1980-00	4.1	4.2	2.4	1.0	2.0
1962-00	5.3	6.3	2.2	1.7	3.2

Source: Own estimates based on data from "Institut d'Economie Quantitative, Ministry of Economic Development and International Cooperation"

Table 7- Growth Decomposition (1962-2000) (in % of total GDP growth)

PERIOD	CAPITAL	LABOR	TFP	TOTAL
1962-69	59.0	11.4	29.6	100
1970-80	36.0	23.9	40.1	100
1980-85	76.2	45.5	-21.7	100
1985-90	28.5	45.8	25.7	100
1990-95	28.1	41.9	30.1	100
1995-00	19.3	29.6	51.1	100
1980-00	36.2	39.2	24.6	100
1962-00	41.5	26.9	31.6	100

Source: Authors' estimates based on IEQ database

The sectoral decomposition shows that agriculture had a large but unstable influence on overall growth performance. In the sixties, its contribution to growth was very small, 0.3% out of a GDP growth equal to 6.5% per annum. This poor performance was due mainly to the negative effects of a land reform which was rightfully perceived by farmers as a policy of collectivization. In the seventies, agricultural output grew fast, at 6.7% per annum, thanks to the reversal of the land reform and to a succession of good natural conditions. In the period 1980-2000 on which the study is focused, the average growth of agriculture was higher than GDP growth, although there were sub-periods (1981-86 and 1991-95) where agricultural growth was very low or even negative. The fastest growing sector was manufacturing, particularly textile and garment. Outside the food industry which depends to a large extent on

agricultural, manufacturing value-added grew at almost 11% annually over about four decades and at more than 7% during the eighties and nineties. By the year 2000 the textile and garment sector accounted for almost half of total manufacturing employment and 14% of total employment. The fast growth of this sector facilitated the absorption of a large active female population with low skills, which came essentially from low income households, initially originating in the small towns where this activity developed and later on coming from neighboring rural areas. Tourism also made a significant contribution to growth, its value-added grew at more than 12% per year on the average over 1962-2000. Although its growth decelerated in recent years and it has become more sensitive to exogenous shocks, this sector increased its share in total employment from an insignificant proportion to almost 3% of the total labor force.

It is the development of the private sector, particularly of the export-oriented sector, which has probably been the most important driver of growth since the early seventies. Had the government continued with the policies of the sixties which left little room for the private sector, Tunisia would not have been able to achieve the high growth it has enjoyed. The government that run the country in the sixties believed in the superiority of the public over the private sector in all activities, including in agriculture. Even though it has to be credited with a public policy favorable to education and to the development of infrastructure, it did very little to encourage the private initiative. On the contrary, by imposing the cooperative system on agriculture and even on domestic commerce, it created a lot of uncertainty that discouraged private investment and job creation, which resulted in the very low rate of growth employment in the sixties.

The new government that came to power in 1970 abandoned the socialist policy of the sixties and reversed the collectivization decisions that were hastily taken in 1968-69. While continuing to develop the public sector it declared early on its intention to foster the expansion of the private sector and to attract FDI. It established the off-shore regime for exports as early as 1972 and developed finance mechanisms that facilitated the creation and growth of SMEs, particularly in manufacturing which grew at more than 10% annually and increased its employment at the average rate of 5.6% throughout the seventies. This growth was also facilitated by windfalls from the two oil shocks of the seventies which the government used to build infrastructure and invest in human capital.

The failure to adjust following the downturn in oil prices in the early eighties and the excessive reliance on external borrowing instead led to serious macroeconomic disequilibria in the first half of the eighties. Capital accumulation was very high, exceeding 30% of GDP on the average, but used inefficiently it yield the slowest growth since the early sixties. These economic difficulties, with foreign exchange reserves almost vanished in 1986 and very stringent import restrictions put in place, led to the implementation of a stabilization policy followed by a structural adjustment program (1986-87 to 1993). The instauration of fiscal discipline and the realignment of the exchange rate were necessary to bring down huge public and external deficits and to prepare the transition to faster but more sustainable growth. Moreover, the reduction of political uncertainty resulting from the change in political regime in 1987 improved the business climate as well and the private sector took on a more active role, particularly in export-oriented activities.

III-2- Characteristics of poor households

Household surveys reveal the persistence of certain characteristics of poor households, which set them apart from the rest of the population. The incidence of poverty is much higher among households with heads working in agriculture and construction than in other sectors. In urban areas the HC index was more than 10% among construction workers in 1990 against an overall index of 3.5%. Construction workers also suffer far more from rural poverty than even those employed in agriculture, particularly in the year 2000 (Table-8). The poor are therefore employed in low-skill, low productivity jobs, as construction workers or agricultural laborers. Those who are self-employed, farmers in rural areas, have very small farms averaging about two hectares per farm.

Table 8-Poverty incidence (lower line HC index) by sector of activity (1990, 2000)

SECTOR OF ACTIVITY	1990		2000	
	URBAN	RURAL	URBAN	RURAL
Agriculture and Fishing	3.0	13.1	1.2	7.6
Manufacturing	1.9	8.4	1.2	7
Construction	10.5	17.3	3.5	14.7
Commerce Transport and communications	2.6	7.6		
	0.8	2	1.6	3.4
Hotels and entertainment	1.4	7		
Other services	3.9	17		
Total population	3.5	13.1	1.7	8.3

Source: WB (2003)

Rates of unemployment are relatively low among heads of poor households (less than 5%) but the latter tend to suffer from far higher youth unemployment than other types of households. Almost one out four active persons is unemployed among the poor population in 2000 against less than 14% for the population above the upper poverty line (Table -9).

Poor households are larger, having more than seven members against less than five members for households above the upper poverty line. They also tend to have more children than others. Moreover and as expected, the head's human capital is very low, with more than 60% with no schooling at all and another third with just primary education in 2000. This contrasts with a much higher level of education among heads of non-poor households, two-thirds of which have had at least primary education (Table-10). However, heads of poor households are not older on the average than those of non-poor ones. Regarding gender, households with female breadwinners are not poorer on the average than male-headed households. In rural areas the surprising finding is that the incidence of poverty is lower among female-headed than male-headed households.

Table 9- Unemployment by poverty status 2000
(Rate of unemployment in %)

	CORE POOR	CORE & VULNERABLE	OTHER	TOTAL
Tunisia	24.5	20.4	13.6	14.2
Urban	22.9	21.3	13.2	13.5
Rural	25.0	19.6	14.6	15.5

Table 10- Household characteristics by poverty status (2000)

Characteristic	CORE POOR	CORE & VULNERABLE	OTHER
Share of population	4.1	5.7	90.1
Average size of household	7.1	6.3	4.7
Average age of head of household	47.2	48.2	52.5
Number of children (0-15)	3.7	2.9	1.5
Level of education of head of household (% distribution)			
No education	60.8	49.9	37.5
Primary	34.3	42.9	36.0
Secondary	4.9	6.9	21.0
Higher	0.0	0.3	5.5

III-3- Distributional and poverty impact of growth

The growth incidence curve (GIC) approach, developed by Ravallion and Chen (2003), is highly useful in assessing whether growth has been pro-poor or not. Estimated on the basis of household expenditures micro data, the GIC measures the rate of growth in consumption between two points in time at each percentile of the expenditures distribution. The authors define the rate of pro-poor growth (RPPG) as the area under the GIC up to the headcount index. If $g_t(p)$ is the rate of growth of per capita real consumption expenditures for the percentile p of the distribution and H_t the headcount index at the initial point in time (t), then RPPG is

$$RPPG = \int_0^{H_t} g_t(p) dp / H_t$$

The rate of pro-poor growth is thus the average growth in consumption over the population up to the headcount index. The measure of poverty implicit in RPPG satisfies three axioms considered essential for any relevant poverty measure, the focus axiom, monotonicity and the transfer axiom (Ravallion-Chen).

GICs are estimated for Tunisia for the long period 1980-00 and for sub-periods corresponding to HCS years: 1980-85, 1985-90, 1990-95, 95-00 and 1990-2000⁵. Figures 2 and 3 show GICs for the long period 1980-00 for the country as a whole and separately for urban and rural Tunisia. For all Tunisia GIC starts with high growth rates for the first percentiles of the population and slopes downward as the level of expenditures increases, even though growth remains positive for all percentiles. Thus, growth has benefited to all income brackets but more to the lower than to the higher brackets according to the HCS data. This implies that not only growth was pro-poor according to the absolute definition of poverty and no matter what poverty line is used, but it was also accompanied by a reduction in inequality as revealed by changes in the distribution of consumption. Separate GICs for rural and urban areas confirm the pro-poor growth conclusion for both areas but show a much larger reduction in inequality in rural than in urban areas (Figures 3-a and 3-b).

Thus, for a wide range of poverty lines and headcount indexes, the Tunisian growth patterns have definitely been pro-poor, with an annual pro-poor growth rate equal to 1.2 percent for all Tunisia in the nineties. The urban poor benefited more during this period, achieving a pro-poor growth rate of 1.5 percent against 0.9 percent for the rural poor. In the eighties, growth was much more pro-poor and the rural poor were the largest beneficiaries of growth (Table 11).

The analysis by sub-period shows positive growth rates for almost all percentiles over all five-year periods. A noticeable difference between the eighties and the nineties is that while GICs are declining in the first period, implying an improvement in income distribution, particularly in rural areas, they are essentially rising in the nineties, with the exception of the rural GIC in the second half of the nineties which was declining. Thus, contrary to the eighties, growth was accompanied in the nineties by increasing inequality (annex 1).

Pro-poor growth rates are shown in Table-11 for the country as a whole and for different regions both for the population up to the headcount index and for 20 percent of the population. PPGRs are positive for the long period and all the sub-periods between 1980 and 2000, with the exception of the period 1990-95 over which PPG was almost zero in rural areas and -0.8 percent in urban areas. PPG is positive in all sub-periods since 1980 for growth measured up to 20 percent of the population. In the eighties the rise in consumption was significantly higher for the rural than for the urban poor, averaging 4.7 percent per year for the former against 3.4 percent for the latter. PPGRs were particularly high during the period 1980-85. An important contributing factor was the significant increase in wages and government salaries that took place during that period, mainly for political reasons. Foreign borrowing and large current account deficits financed much of this increase, which reduced poverty. Favorable agricultural conditions, particularly in 1985, the survey year, also contributed to poverty alleviation in all regions. In the nineties PPG was higher in urban than in rural areas and overall PPG was slower than in the eighties.

⁵ Data used for the derivation of GICs and for the Datt-Ravallion decomposition of changes in the headcount are the following: the whole sample of the survey for 1980, 1985 and 1990; the whole sample of the 1995 survey with the exception of the center-west region for which the data are unavailable. For the year 2000 the only data the authors could access are data aggregated by decile of the population or by region. Based on these aggregated data and assumptions on the distribution of consumption expenditures across surveys, Bibi Sami generated the whole data set for the year 2000. The authors have used his generated data set in the estimates involving the year 2000. They are grateful to him for making it available.

Over the long period estimates show that growth was pro-poor in all regions. Regions of high poverty concentration, the North-west and the Center-west, record high PPGRs while Greater Tunis achieved lower growth, particularly in the second half of the eighties during which PPG was almost equal to zero. Inter-regional inequality seems to have been reduced, although the Center-east, which is a relatively well-off region, enjoyed almost the highest growth in the eighties, both in terms of pro-poor growth and average growth across its whole population.

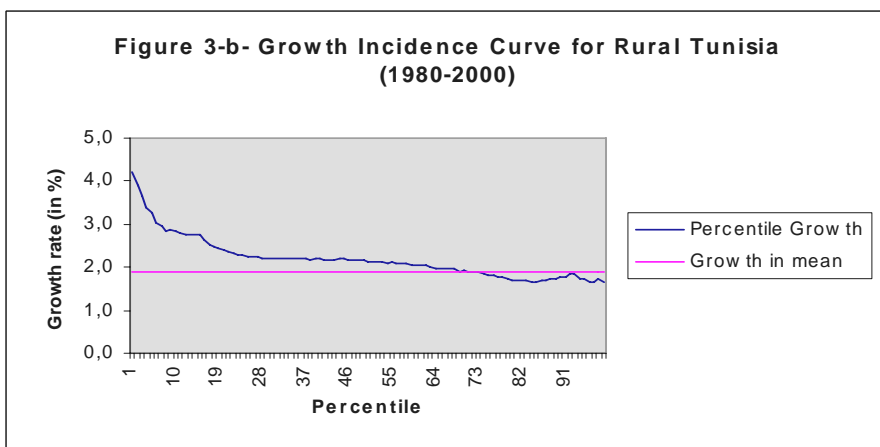
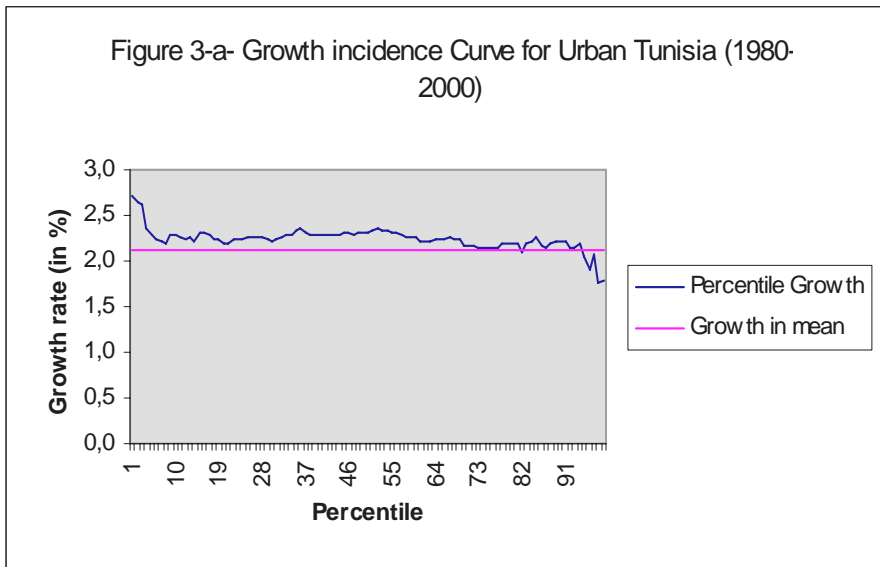
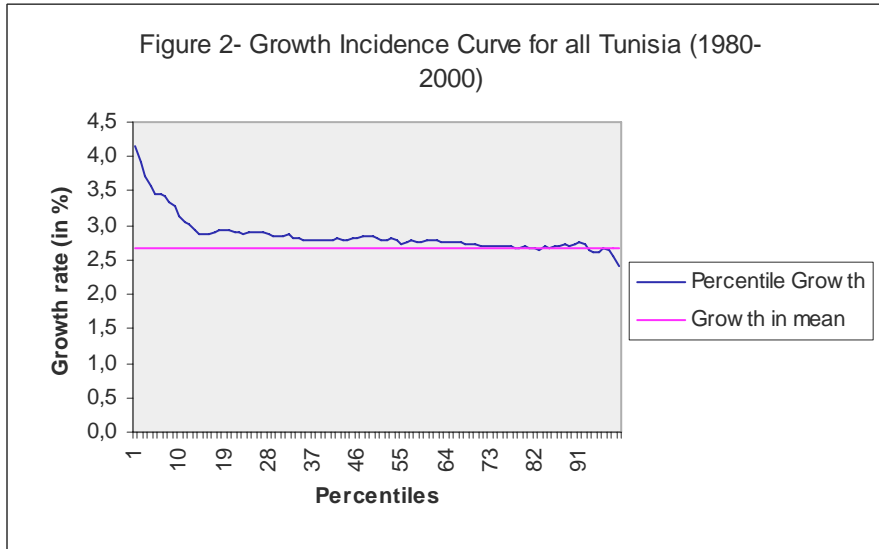


Table 11- Pro-Poor Growth Rates (1980-1995)

	1980-85		1985-90		1990-95		1995-00		1990-00	
	Up to headcount index	Up to 20% of population	Up to headcount index	Up to 20% of population	Up to headcount index	Up to 20% of population	Up to headcount index	Up to 20% of population	Up to headcount index	Up to 20% of population
WHOLE COUNTRY										
All Tunisia	8.1	8.1	2.6	2.6	0.1	-0.1	2.4	2.5	1.2	1.2
Urban	5.2	4.7	1.6	1.7	-0.8	0.2	3.9	2.8	1.5	1.5
Rural	7.2	8.0	2.3	2.3	0.1	-0.2	1.9	2.0	0.9	0.9
REGIONAL										
Greater Tunis	4.4	4.3	0.2	0.6	-	-	-	-	-	-
North East	6.8	6.2	3.8	3.3	-	-	-	-	-	-
North West	7.5	8.8	1.4	1.5	-	-	-	-	-	-
Center west	8.4	9.2	2.3	2.4	-	-	-	-	-	--
Center East	8.6	8.5	3.3	2.5	-	-	-	-	-	-
South West	6.8	6.4	-1.2	-0.3	-	-	-	-	-	-
South East	3.4	2.9	6.8	6.6	-	-	-	-	-	-

Source: Authors' estimates

The Datt-Ravallion (DR) decomposition of changes in the headcount shows that growth played the major factor in poverty reduction in the nineties while rising inequality contributed in the opposite direction in urban areas (Table 12). In the first half of the eighties growth was also the driving force behind poverty reduction, although the decline in inequality accounted for about 30 percent of poverty reduction in rural areas. In the second half of the eighties the latter factor played a much more important role, particularly in urban Tunisia where the contribution of growth was almost zero.

What may seem to be puzzling is the sharp decline in the incidence of poverty in the first half of the eighties which was a period of weak growth. It is worth to be reminded that the DR decomposition is based on growth in average household consumption, not on growth in per capita GDP. The drop in poverty is therefore consistent with the rise in household consumption at more than 5 percent annually during the same period. What made consumption increase at such a high rate in spite of low GDP growth is an important question.

Large increases in minimum wages, large food subsidies and high growth of agricultural and manufacturing output, those are the main factors accounting for the sharp drop in the incidence of poverty in the first half of the eighties. Real minimum wages increased indeed by 25 percent in agriculture and by over a third in the industrial sector between 1980 and 1983. These wages steadily declined in later years until the mid-nineties and in 2000 they were at least 10 percent lower than the levels reached in 1983. Moreover, although unstable, agricultural value-added grew on the average at 7 percent annually and manufacturing grew at close to 8 percent per year. The performance of these two sectors contrasts with that of aggregate growth which was held back during this period by the sharp slowdown in the non manufacturing industrial sector and in services. The government also maintained consumer prices of basic food products at very low levels, which resulted in a sharp rise in subsidies to

more than 4 percent of GDP in 1984. Thus, what may seem to be mainly a growth effect according to the DR decomposition is in fact a combination of growth confined to two sectors, agriculture and manufacturing, very large increases in minimum wages and high social spending, the latter resulting in higher budget and current account deficits.

In sharp contrast with the previous period average consumption almost stagnated between 1985 and 1990 while the incidence of poverty continued to decline although in much smaller proportions than in the first half of the eighties. The DR decomposition shows that lower inequality accounts for all of this improvement in urban areas and for about a third of the reduction in rural poverty while growth in rural consumption explains the remaining two-thirds of the rural performance. The government implemented a stabilization policy during this period which was accompanied by a pro-poor social policy. It adjusted prices of subsidized food but moved towards better targeting of the remaining subsidies. In 1986 it launched a new income transfer program, the program of assistance to needy families, which later reached more than 100 000 families located mainly in rural disadvantaged areas.

The poverty headcount increased in rural areas during the first half of the nineties, due essentially to a growth effect, while it almost stagnated in urban areas. We should recall that this period witnessed a decline in agricultural production, particularly during the survey year of 1995. This shows that social spending is not sufficient to stem the rise in poverty when agriculture suffers a loss in output over several consecutive years.

The growth-poverty reduction correlation is clearly confirmed by the performance recorded in the second half of the nineties during which GDP growth averaged 5.6 percent annually, agriculture recorded a growth rate exceeding 8 percent, and the incidence of poverty fell by more than three percentage points in rural areas and by more than 1 point in urban areas. According to the DR decomposition growth accounted for all this improvement while the rise in inequality induced a small effect in the opposite direction. Over the long period of the nineties growth was clearly the most important factor in shaping the poverty outcome.

**Table 12- Decomposition of Changes in Headcount Index
(Growth-Redistribution)⁽¹⁾**

	ALL TUNISIA	URBAN	RURAL
1980-85			
Change in headcount	-10,5	-3,7	-12,8
Growth	-9,2	-3,9	-9,7
Redistribution	-0,5	0,9	-3,4
Residual	-0,8	-0,7	0,3
1985-90			
Change in headcount	-2,9	-1	-4,5
Growth	-0,6	0,2	-3,1
Redistribution	-2,2	-1,2	-1,2
Residual	-0,1	0	-0,2
1990-95			
Change in headcount	-0.1	-0,29	0.87
Growth	-0.72	-0.65	1.74
Redistribution	0.73	0.39	-0.76
Residual	-0,11	-0,02	-0.1
1995-2000			
Change in headcount	-1.95	-1.10	-3.16
Growth	-2.21	-0.95	-4.07
Redistribution	0.23	-0.17	0.79
Residual	0.03	0.02	0.13
1990-2000			
Change in headcount	-2.05	-1.38	-2.29
Growth	-2.9	-1.66	-1.96
Redistribution	1.03	0.19	0.09
Residual	-0.18	0.09	-0.41

(1) Decomposition based on the Datt-Ravallion method

IV- FACTORS AFFECTING THE PARTICIPATION OF THE POOR IN GROWTH

The previous analysis has highlighted the sharp decline in the incidence of poverty in Tunisia and illustrated how growth has been pro-poor for the country as a whole and for the rural and urban areas taken separately. It is worth adding that in terms of absolute figures the number of the poor dropped since 1980, from about 1.2 million poor inhabitants in 1980 to less than 400 000 inhabitants in 2000. The decline in rural areas is more dramatic, from about 850 000 to 270 000 inhabitants between the two years. This section addresses the factors underpinning the participation of the poor in the growth process.

IV-1- Macroeconomic and trade policies, poverty and growth

The control of inflation is important for the poor since their income tends to be less indexed and therefore less protected from the erosion of purchasing power than non-poor households (Easterly and Fischer 2001). The Tunisian Government has succeeded in achieving a relatively high degree of macroeconomic stability since the mid-eighties. It has managed to keep inflation down, through price control until the mid-eighties and a better management of monetary and fiscal policy since the implementation of the stabilization and structural adjustment program in the period 1986-93. The inflation rate fell under 5% on the average in the nineties and decelerated to less than 4% during the period 1995-2000. The budget deficit has also been brought down from almost 5% in terms of GDP in the eighties to 3.3% in the nineties. A high deficit may be associated with social spending and generous increases in government salaries but clearly such a policy is not sustainable as the Tunisian experience shows. The government granted huge salary increases in the first years of the eighties, resulting in a record budget deficit in 1983 exceeding 8% of GDP and a current account deficit close to 7% of GDP. Poverty dropped during that period of low growth but at the cost of major macroeconomic disequilibria that had to be corrected in later years. The current account deficit was brought down to less than 3% in terms of GDP during the second half of the nineties, along with the budget deficit, which is an indication of a better macroeconomic management and a more stable macroeconomic environment that avoids policy reversals that may hurt the poor.

Trade policy was very protectionist throughout the eighties and the first half of the nineties. Since 1996 the Government has gradually liberalized trade in manufacturing with the view of establishing an FTA with the EU. Parallel to the protection of inward-looking activities, the offshore export sector has benefited since the seventies from very generous government incentives, particularly a special duty-free regime on imported inputs as well as a permanent corporate income tax holiday. While protection of domestic industries may have hurt the poor by shielding capital-intensive activities from competition, export incentives have corrected these biases to a large extent and fostered the development of labor-intensive light manufacturing, which has been a major source of growth and poverty reduction. The pursuit of an active exchange rate policy, avoiding the real appreciation of the domestic currency and bringing quick adjustment in case of misalignment since 1986, has also contributed to the rapid growth of exports of manufactured products and tourism services over the last twenty years.

IV-2- Factor and product markets, growth and poverty

The poor connect to growth and to other sources of improvements in purchasing power through asset acquisition, the labor and product markets. Given the high volatility of farm production due to highly unstable rainfall, low-income rural households do not rely only on income from cultivating their own land or as agricultural workers. In low rainfall years, which are frequent and sometimes consecutive, production is so low that it cannot procure the minimum income required to avoid poverty. Irrigation has expanded over the last twenty years, but most low-income farmers do not have access to irrigation due to lack of capital and difficult access to credit. They therefore seek additional income outside of agriculture in order to secure a minimum income and to stabilize their consumption in the face of highly volatile income from farming.

Asset holdings in rural areas and poverty

Land distribution has remained very stable over the last four decades. An ill-prepared land reform was attempted in the sixties but was quickly abandoned due to strong local opposition. The poor have therefore been endowed with very little in terms of land assets. Under the French protectorate the most fertile land of the north of the country was in the hands of French landowners while Tunisian farmers were pushed on marginal land. In 1964 the Tunisian government nationalized French farms and transformed them in state-owned farms (400 000 ha).

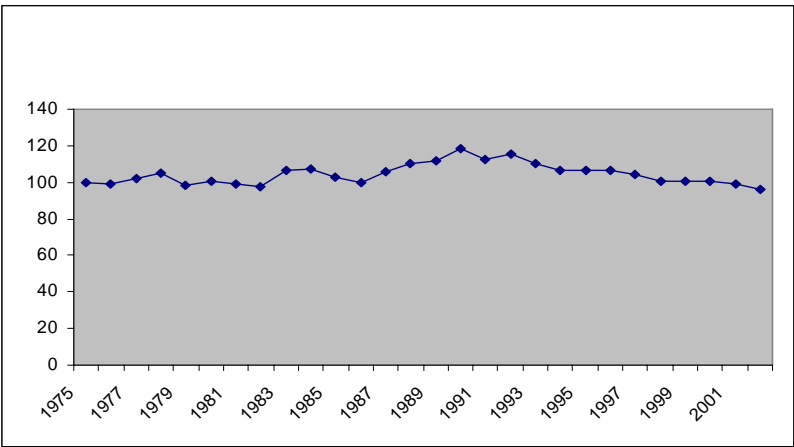
As previously mentioned, the regime in power experimented in the sixties with a major land reform which was, in principle, based on the cooperative system but which in practice turned into collectivization. Because of the total failure of that experience and the collectivization connotation that it took, no land reform has taken place ever since. Land distribution has remained very skewed with the poor owning very little land. In 1991 more than two thirds of the farmers owned about 10% of total land while the 1.2% richest farmers owned more than 22% of the total land (Table-A-6 in annex). The state still holds large farms, which had been expropriated from the French colons following independence. Some of these farms have been leased to private farmers, in principle to agricultural engineers, on a long-term basis but the poor have been excluded from these leases. Out of the 400 000 ha owned by the state about half has been leased to private farmers. The rural poor have remained with very little land endowments for which property titles are not even secured in most cases. Given these persisting landholding conditions, it is safe to argue that the sharp decline in rural poverty in Tunisia cannot be attributed to a better access to land by low-income rural households.

The removal of the anti-agriculture bias of price policy at the beginning of the eighties may have contributed to the improvement of the income of small farmers as well as to the moderate increase in rural real wages. In the seventies the government maintained low prices for basic commodities, particularly of cereal-based products, in order to control wages in the manufacturing sector. This policy was reversed in the early eighties with sharp increases in the producer prices of cereals and later on with the granting of subsidies for dairy products (Figure-7). These incentives have certainly benefited to large and medium size farmers more than to small farmers, but the latter have been favorably affected by this shift in policy too. It is not clear, as a matter of fact, how their farms can survive, given the poor soil and climate conditions, if trade in agriculture were liberalized and the domestic prices of field crops were aligned on international prices. On the other hand the removal of subsidies on inputs such as

fertilizers, pesticides and animal feed may have worked in the opposite direction than the increase in product prices, although the effect on small poor farmers may have been negligible due to their very limited use of these inputs.

Poverty incidence among small farmers has been relatively high even though declining. However, the first two rural deciles have higher proportions of households headed by non-agricultural and non-agricultural workers and lower proportions of landowners than the whole rural population. The poor are essentially landless workers, the latter accounting for between 45 and 48 percent of the population for the first two deciles as opposed to 38 percent for the total rural population.

Figure-7- Changes in the real price of durum wheat (1975-2002)



The Household Consumption Surveys (HCSs) show that the majority of the poor in rural and urban areas (about two thirds) are laborers whose asset endowments, both physical and human, are very low. HCSs do not provide information on the various sources of income, since they only give the occupation of the head of the household. Wages are perhaps the main source of income, but other sources such as very small-scale livestock and dairy production and remittances from emigrants are probably also important.

One of the most important activities from which the low-income rural population has benefited is livestock. The production of meat and milk has increased at more than 7 percent per annum on the average since the late eighties, due to a deliberate policy seeking self-sufficiency. This policy included high import duties, exceeding 100 percent on meat and dairy products, subsidies on milk collection from farmers and more importantly the creation of a large number of milk collection centers in the country. Combined with a significant development of the rural road infrastructure, these incentives led to the fast growth in meat and especially milk production since the late eighties. Tunisia is today almost self-sufficient in meat and milk while local production accounted for less than 20 percent of total consumption in the late eighties.

What is particularly relevant for poverty alleviation is the large number of cattle raisers (for milk production) which exceeded 120 000 farmers in 2002. Although there are no data on the distribution of livestock among farmers, it is estimated that small owners hold about a third of

total livestock, providing them with an important source of income and helping many of them avoid poverty.

Apart from livestock as an additional source of income from agriculture, the latter is not the only sector of occupation for a large proportion of farmers since multi-activity is quite widespread in rural areas, particularly among small farmers. The 1995 farm survey shows that about 50 percent of the landowners holding less than five ha were engaged in activities other than farming, mainly in construction, food industries and services. For landowners holding between 5 and 10 ha, the proportion of those with multi-activities falls to 40 percent and this proportion sharply declines as the size of the farm increases (Table-A-7 in annex). While living in rural areas small landowners spend part of their time in non-agricultural activities, which provides them with important additional incomes. They spend some of their working time in construction, public works, and food processing plants or in public forest services. Some of them may also hold grocery stores, be engaged part time in other retail trade or in handicrafts.

Labor markets and poverty

The poor connect to growth significantly through the labor market. In rural areas the demand for labor depends largely on rainfall, declining in years of drought. Notwithstanding these fluctuations, agriculture has created very few jobs in the long run, resulting in a total increase of no more than 5 percent over four decades. Rural out-migration and increasing mechanization account for this quasi-stagnation in total employment in agriculture over this long period. The implication is that this sector has hardly procured any new jobs for the poor⁶.

The government sets a minimum wage for agriculture but its enforcement is much more difficult than in manufacturing. The daily minimum real wage in agriculture increased at the average rate of 0.5% per annum over the period 1980-2000, or roughly by 10% over the whole period, which may account for only part of the decline in poverty. The real gains took place in the years 1980-83 when real minimum wages increased by 25% in agriculture. These large increases contributed to the sharp decline in the incidence of poverty during the first half of the eighties. In contrast, in the first half of the nineties rural wages declined at a time when the incidence of poverty increased in rural areas. In spite of competition for labor by other sectors both in rural and urban areas, the significant increase in mechanization, which was driven by important financial incentives, reduced the demand for labor in agriculture and prevented the upward pressure on real wages. The relatively high growth of agricultural value-added, equal to an average of 4 percent annually during the period 1980-2000, and the very moderate rise in real wages, resulted in a significant decline in the income share of labor.

Human capital, population growth and migration

Schooling: Poor households have acquired less education than non-poor households, even though the differences are much wider between urban and rural areas than between the rural households themselves. In spite of the progress recorded in the nineties, heads of rural

⁶ Our conclusion is based on data available at the Tunisian « Institut d'Economie Quantitative ». A World Bank Report on employment (2003) draws a different conclusion for the period 1997-2001 based on employment surveys, which is that agriculture accounts for a large share of job creation during that period. The employment surveys show that about one quarter of new jobs were created in agriculture during those years even though production decreased due to drought.

households continue to suffer from complete lack of education since over 53 percent of them received no education at all as late as the year 2000, down from 60 percent in 1990 (Table-A-2) but still much higher than the 27 percent illiteracy rate among heads of urban households. Almost 60 percent of heads of households in the first decile of consumption expenditures still had no education in 2000, down from over 70 percent in 1990. Regarding enrolment ratios, which are more indicative of future trends in human capital, improvements in rural areas have been significant for the age bracket 6-18, rising from 60 percent in 1990 to almost 70 percent in 2000, with households in the first decile catching up with the rest of the rural population. However, enrolment rates are still significantly higher in urban than in rural areas.

As far a poverty incidence is concerned, what seems to make a difference is not primary education but secondary education. In 2000 the proportions of primary education are almost the same at the national level for the first decile than for the whole population, against a fourfold differential in secondary education. In rural areas, while the proportions of primary education and enrollment rates are about the same across consumption expenditures deciles, those of secondary education are much lower for the first deciles. This means that education is important but primary education is not sufficient to be pulled out of poverty. Estimates of return to different levels of education corroborate this conclusion. In the private sector there is no return on incomplete primary education, a moderate return of 9 percent on completed primary education while the return on secondary education is estimated at 26 percent. In the textile and clothing sector, which employs a large number of the low skilled, the return to primary education is estimated at 2 percent against 15 percent to secondary education⁷. This evidence shows that a level of learning higher than primary education is needed in order to increase one's income comfortably above the poverty level.

Population growth: High population growth tends to increase the incidence of poverty through pressure on the labor market and high dependency ratios. When population grows fast the supply of labor increases at high rates, leading to downward pressure on wages and depressing labor income for some low-skilled workers below the poverty line. High population growth is also generally associated with high dependency ratios and poverty incidence since the same income earned by adults will have to be shared with a larger number of children. This population growth effect is particularly important for small landholders. As population growth slows down per capita income rises even if total income derived from agriculture, from one's own farm or from wages, increases only moderately as it has in Tunisia⁸.

The slowdown in population growth has probably contributed in a significant way to the decline in poverty. The nineties witnessed a significant deceleration, from an average growth rate of 2.3 percent annually in the second half of the eighties to 1.3 percent in the second half of the nineties (Table-13), which makes Tunisia the country with the lowest population growth in the Middle East and North Africa. Growth of the urban population, which depends on both natural growth, the expansion of urbanization and the inflows of rural immigrants, outpaced that of the rural population which remained very low over the last decades. Several

⁷ These estimates are provided in World Bank, "Employment Strategy", 2003. They are derived from an econometric wage equation based on the 2001 Employment Survey involving over 26,000 individuals.

⁸ The effects on economic growth of population growth and changes in its age structure following the demographic transition are the subject of debates among economists. While numerous cross-country growth studies show a negative impact of population growth on growth in per capita income (Mankiw, Romer and Weil, 1992), other studies (Bloom, D.) argue in favor of neutral effects of population growth once account is taken of changes in the age structure that accompany this growth.

factors account for the slowdown, relatively high economic growth, the early promotion of women's rights, the introduction of birth control and family planning as early as the beginning of the sixties, which was perhaps unique among Moslem countries, and the expansion of education, particularly among women.

The incidence of the slowdown in population growth on poverty can be inferred from changes in dependency ratios across consumption deciles between the consumption survey years 1990 and 2000. While dependency ratios declined between 1990 and 2000 for all deciles, the decline is by more than one half for the second decile, against about a third for the first decile and for the population as a whole. The important dependency change in the second decile was the result of a larger reduction in household size and a larger increase in the number of active members than in other deciles. Since those who pulled themselves out poverty between 1990 and 2000 moved most likely to the second decile between those two survey years, their dependency ratio became much lower on the average than for the first decile which remained predominantly poor. This provides evidence for the hypothesis that the slowdown in population growth and the reduction in household size was indeed associated with a decline in the incidence of poverty.

Table 13- Population growth and poverty (%)

PERIOD	TOTAL POPULATION	URBAN	RURAL
Annual growth rate (in %)			
1961-70	2.0	4.2	0.6
1971-80	2.2	3.7	0.9
1980-85	2.6	3.5	1.6
1986-90	2.3	3.8	0.5
1991-95	1.9	2.5	1.0
1996-2000	1.3	1.7	0.6
1980-2000	2.0	2.8	1.0
Dependency ratios⁽¹⁾			
<u>1990</u>			
First decile	4.7		
Second decile	5.4		
All Population	2.8		
<u>2000</u>			
First decile	3.2		
Second decile	2.5		
All Population	2.0		

(1) Measured by the ratio of inactive members to active members of households.

Source:

- Population growth rates: Institut National de la Statistique
- Dependency ratios: Calculations based on figures on size of households and number of active members per household from HCS, 1990 and 2000.

The urban labor market:

As expected, the sectoral composition of employment has radically changed over the last four decades. The share of agriculture has almost been halved, declining from almost 46 percent of total employment in the sixties to 23 percent in the second half of the nineties. Manufacturing has seen its share rise by almost ten points between the same periods, from about 14 to 24 percent. Currently, textiles, clothing and leather account for about half of total manufacturing employment and most of the 300 000 workers it employs are low-skilled female workers who belong to low-income households. Government and non-government services have also expanded at the expense of agriculture, increasing their shares between the same periods respectively by about six and eight percentage points. Within non government services tourism has been an important activity, not only as a source of foreign exchange but increasingly as an employment generating activity, raising its share from an insignificant level in the sixties to almost 3 percent of total employment in the second half of the nineties. Finally, the non-manufacturing industry, of which construction accounts for about 80 percent of employment, lost about one percentage point in total employment between the same two periods, from about 11 to 10 percent. While low-income households are directly or indirectly concerned by changes in employment in all sectors, they are particularly affected by those that take place in agriculture, textiles and clothing, construction and tourism which are intensive in low-skilled labor.

In urban areas the minimum wage legislation is more or less enforced in the industrial sector. However, a large number of the poor work in construction where job stability is lacking even though daily wages are about the same as minimum wages. The expansion of this sector, which has accompanied the good growth performance of the Tunisian economy, has helped improve the living conditions of low-income households and contributed to poverty alleviation, but the high flexibility in the construction labor market and the lack of social protection for workers in this sector are such that any slowdown in this activity may have severe adverse effects on workers' income and therefore on poverty.

As previously mentioned, textile and clothing account for almost half of manufacturing employment. This sector employs low-skilled low-education and essentially young female workers and its development has probably had a significant impact on poverty since these workers generally come from low-income households and many are migrants from rural areas. Salaries derived from this sector are therefore an important additional source of income for these households.

In the nineties about 72 percent of the labor force employed in this sector had either primary education or no education at all, against 63 percent for the whole economy. Among all activities only agriculture and construction fared less than textile and clothing in terms of education, with about 90 percent and 80 percent of their respective employed population having completed at most a primary education. The textile labor force is predominantly female with women accounting in 2001 for over 75 percent of its workers against only one third in all the private sector and one-fourth in the government sector.

In dynamic terms poverty declines either because the poor find jobs and obtain higher wages given their human capital endowments or improve their endowments. Since the accumulation of endowments takes time, the skill composition of labor demand, which depends on the strategy of development, has an important bearing on income earned by the poor. The industrial strategy put in place since the early seventies has provided incentives, mainly fiscal,

that boosted manufacturing exports. The production of textile and clothing for exports to the European Common Market has developed since that period due both to these incentives and to EEC textile and clothing trade policy as well. Just as in most developing countries import substitution was the dominant development strategy in the sixties. In the seventies and up to the late eighties the government pursued the same policy of protection of the local market coupled with export promotion through fiscal incentives. At the same time the EEC granted Tunisia duty-free access to its market for textile and clothing based on quotas that have seldom been binding. The fiscal incentives on the Tunisian side and the duty-free access on the European side explain the attraction to this sector of first European foreign direct investment and later on national investment as well.

Apparel is very labor-intensive, its capital per worker estimated in 2000 at only 30 percent of the average capital-labor ratio. Only the construction sector has a lower capital-labor ratio equal to about 22 percent of the economy's average. The light nature of this activity has helped create a large number of jobs with very little capital, mainly foreign capital, but at the same time made the latter more footloose than FDI in other sectors and sensitive to changes in location incentives such as those resulting from the dismantling of the Multi-Fibers Agreement. As a matter of fact Tunisia is expected to be one of the losers from the liberalization of trade in textile and clothing, which could hurt a large number of low-income households.

In addition to very generous fiscal incentives and easy access to the EU market, the relatively light administrative procedures applied to the off-shore regime played an important role in the development of the off-shore clothing activity: light customs control since imports by off-shore firms are duty-free, very little control by the tax administration because of the exemptions that these firms enjoy on the value-added tax and on income taxes. These exemptions are advantages that directly raise returns to investment in these activities, but also boost them indirectly by avoiding the heavy transaction costs that on-shore firms are confronted with.

As elsewhere, the garment employees are essentially young women who work for a certain period and help their parents before they get married. Changes in parents' mentalities, driven largely by government policy in favor of women rights, took place as early as the sixties and participation of women in the labor market gained acceptance among the wider population, which enabled garment firms to draw on a large female working force. Not all of the income earned by these workers went to supplement their parents' income. Probably a lot of it has been saved for use after marriage. In either case, it should have an impact on the income of the poor as a source of financing current consumption or of asset accumulation that would generate income in the future for new households.

Labor relations are regulated by a labor code that underwent amendments in the nineties, introducing more flexibility in hiring and setting limits on severance compensation. Layoffs for economic reasons remain however highly regulated and the labor law still provides high protection for workers compared to several other developing countries. Social security charges are also relatively high, amounting to 23.75 percent of the wage bill, distributed between employers (16 percent) and workers (7.75 percent). Firms pay an additional 12 percent on the wage bill for various other social charges. The extensive job creation that has taken place in manufacturing in general and in the garment industry in particular cannot therefore be attributed to a permissive labor legislation and to a lack of protection of labor rights. On the contrary, as some analysts have argued, Tunisia's labor legislation is still too

protective considering its level of development and may be a significant factor in explaining the relatively high unemployment rate which has hovered around 15 percent of the active labor force for the last twenty years.

One additional feature of the Tunisian labor market which has helped establish stable relations between employers and employees in the organized sector since 1990 is a system of three-year collective bargaining by which wages are negotiated once every three years. This system, which can work only when inflation remains low and predictable, has probably reduced work disruptions and negotiation costs compared to a system of annual collective bargaining. Such costs would have been borne, at least partly, by workers in general and by low-skilled workers in particular.

Rural-urban migration and remittances

The effects are the alleviation of pressure on the labor market, which has helped maintain rural wages at relatively high rates, and the augmentation of rural income through transfers from urban Tunisia and from abroad. Internal migration between urban and rural areas has followed a pendulum pattern, swinging between work in the construction sector and tourism in urban areas and farming or unemployment in rural areas.

Remittances from abroad have been very important, representing 4.2% of GDP over the period 1980-2000, equivalent to 70% of the total value-added of the textile, clothing and leather sector which accounted for over 50% of total employment in manufacturing in the nineties. In addition, remittances have benefited to all regions. They represented 8.5% of total expenditures nationwide, 8% in the North-west and over 7% in the Center-west, which are significant proportions. It is not clear what proportion of these remittances help emigrants' relatives in Tunisia as opposed to saving and investing locally in homes or other productive projects, but there is evidence of strong solidarity between emigrants and relatives staying in Tunisia. The Tunisian population living abroad is a sizable population, estimated at 550 000 in 1991, and accounts for about 10% of the population living in the country.

Access to credit

Low-income households have very little access to borrowing although some modest financial schemes have been developed to facilitate such access. Some modest financial schemes have been developed for rural and urban households with no access to the banking system but they have remained quite limited. The involvement of the poor in the growth process has been much more important through the labor market than through the credit market.

BOX-1

Pro-Poor growth and Gender Issues

In the early sixties, the Bourguiba regime took three major political decisions regarding gender issues, decisions which were very unusual in a Muslim country: i) banning of polygamy and women emancipation, ii) promotion of birth control and iii) family planning, compulsory school for girls and boys alike. These decisions had overtime a tremendous impact on poverty alleviation and the development of pro-poor growth in Tunisia.

- i) The banning of polygamy and women emancipation in the early sixties had a big impact on the mentalities. It induced a rapid modernization of the society and a relatively smooth adaptation of the economy to the challenges of openness. In particular, women empowerment has been the corner stone of policies of successful family planning and women education, resulting in greater participation of women, including the poorer, in the economy.
- ii) Tunisia embarked as early as the beginning of the sixties on family planning and birth control programs. Although it is difficult to disentangle the effects of the rise in standards of living, the effects of modernization of the Tunisian society and urbanization from those of birth control, there is no doubt that this policy has played a very important role in the sharp decline in population growth over the last three decades, from more than 2.5% at the beginning of the seventies to around 1.2% in recent years, which makes Tunisia the country with the lowest population growth in the Middle East and North Africa. This sharp drop in population growth, which couldn't have taken place without women's emancipation, may have played a very important factor in poverty alleviation.
- iii) Schooling of girls and consequently changes in mentalities has led to a greater participation of women in the labor market. This has facilitated the rapid development of labor-intensive industries since the early seventies, particularly in the garment sector. As elsewhere, the employees of this sector are essentially young women working for a certain period and helping their parents before they get married. Not all of the income earned by these workers went to supplement their parents' income. Probably a lot of it is saved for use after marriage. In either case, it should have an impact on the income of the poor as a source of financing current consumption or of asset accumulation that would generate income in the future for new households. This successful experience achieved by women in the export-oriented garment industry has served as a basis and incentive for foreign firms to invest in other light industries such as the electrical or automotive spare parts industries which are also high users of female labor.

The greater women's participation in the labor market and the availability of a pool of relatively skilled female workers thus facilitated the diversification of the Tunisian industry away from clothing, which is facing a major challenge due to the dismantling of the Multi-Fiber Agreement, and in favor of new industrial export activities. Women's empowerment has therefore contributed not only to poverty alleviation, through larger employment of workers issued from low-income households, but also to a more sustained outward-looking growth.

IV-3- Pro-poor spending

The Government has been committed since independence to free public education. Private education has never been important at any level although it has developed in recent years at the primary level and to some extent in higher education for those students who cannot make it to public universities. Given the strong commitment of the government to education and the marginal role played by the private sector, education accounts for a large share of state budget, exceeding 30% on the average. Even though the Tunisian education system has serious weaknesses, it has provided the poor both in rural and urban areas with significant opportunities of improvements in their living conditions and of social promotion. The rise in the level of education has been dramatic, more than doubling every ten years until 1980 and still increasing at very high rates, at about 30% between 1990 and 1999. The result has been a sharp increase in the average number of years of education among the active population, from 0.6 years in 1960 to over 5 years in 1999. The rate of illiteracy was cut by more than one half by 1998, declining to 31% for men and for women 42%. Although there are still differences in school achievement in favor of the inhabitants of the coastal regions, the improvements are widely shared among the population, including in regions, such as the Center-west, where poverty is concentrated. Tunisia has basically resolved the gender divide at school and girls have the same school opportunities as boys.

The health system remains basically public although the private system has undergone a fast development in recent years. The poor cannot afford of course private health care and have no choice but to turn to public hospitals or health centers which charge them small fees for access to services. Tunisia embarked as early as the beginning of the sixties on family planning and birth control programs, which was very unusual for a Moslem country. Although it is difficult to disentangle the effects of the rise in standards of living, modernization of the Tunisian society and urbanization from those of the birth control policy, there is no doubt that the latter has played a very important role in the sharp decline in population growth over the last three decades, from more than 2.5% at the beginning of the seventies to around 1.2% in recent years. This sharp drop in population growth, which couldn't have taken place without women's emancipation, may have played a very important factor in poverty alleviation.

Rural development programs have also been a major component of government policy for the last two decades, providing infrastructure, water supply, electrification, roads, etc. There are broadly three main categories of social government programs: programs of social assistance to needy families, programs aiming at the creation of employment opportunities and productive capacity building and programs to improve living conditions.

The main social assistance program is the "National Program of Assistance to Needy Families" which was established in 1986 as a safety net accompanying structural adjustment. Eligible households are those below the poverty line and having no support from any other source. The main beneficiaries are the elderly poor, poor widows and the handicapped. In 2001 this program covered about 114 000 households, which is a very significant number compared to that of poor households, and spent a total of about 52 MD (about US\$ 43 million), which corresponds to an average of 452 TD per year (US\$ 375) per beneficiary. On the basis of 3.7 persons per household, this transfer represents about 40 percent of the poverty line, which probably has helped a large number of them to escape poverty or at least to get close to the poverty line. The allocation of this fund clearly favors, as it should, regions with high poverty concentration, particularly those of the Center-West and the North-West.

Employment creation and productive capacity building are embodied in numerous funds and programs. They fall mainly in three categories: employment in public works which have recently accounted for about 44 percent of the total amount, assistance to the strengthening of productive employment and self-employment, accounting for almost 50 percent of total expenditures, and the remaining 6 percent allocated to training programs within firms for first-time job seekers. The total amount spent on the three categories has sharply increased from less than 100 MD (about US\$ 80 million) in 1993 to an average of 240 MD (about US\$ 190 million) in the years 2000-2002⁹. This sharp increase is due to the creation in 2000 of a new employment program providing assistance for self-employment. The state also created in 1997 a micro-credit bank, “The Solidarity Bank”, targeting low-income households and the unemployed youth for which the banking system is inaccessible. The volume of loans has increased at a rapid pace since the inception of this bank but already the latter encounters serious problems of reimbursement, even if its contribution to employment seems to be non negligible.

The third category of government social programs is that of improving living conditions in poor areas which includes housing, health, education and infrastructure. The poor benefit from the general state budget but there are specific instruments that are particularly focused on the poor, the main instrument being since 1993 the “National Solidarity Fund” which spent about 724 MD (about US\$ 575 million) during the period 1993-2003, mainly on infrastructure benefiting directly to the poor. The total number of beneficiaries of this fund since its inception has reached over 220 000 households or close to one million inhabitants, which is an impressive achievement. Roads took the largest share, accounting for 30 percent of these outlays, followed by housing (21 percent), electrification (20 percent) and potable water (14 percent).

Rural roads have played a particularly important role in helping the rural poor connect to urban goods and labor markets and to urban services and to generally improve their living conditions. Although no estimates of the returns to this infrastructure are available, there is a presumption that they are very high and that rural roads have induced significant cuts in transaction costs for the rural poor. The housing component of the Solidarity Fund has not only improved the living conditions of the poor but also freed up income and saving that would have been spent on housing to spend on other food and non-food items with the resulting positive effects on poverty alleviation.

Food subsidies are controversial and can entail significant opportunity costs when they are not targeted, but they have most likely had very positive effects on poverty alleviation in Tunisia, particularly among the urban low-income households. While the rural population meets its needs in cereal products through home consumption, urban workers in general, and the poor among them in particular, consume relatively large quantities of wheat-based products and vegetable oil both of which have been heavily subsidized. In the early eighties, food subsidies were huge, accounting for close to 4% of GDP in some years. Compared with other social spending programs, they took more government resources than any other program with the exception of education, including public health¹⁰. In 1990 the amount of food subsidies that benefited the first quintile accounted for almost 9% of its total expenditures. Since the mid-nineties these subsidies have been more targeted to products consumed by the poor, resulting in a sharp decline in their relative burden to less than 2% in terms of GDP. The resources

⁹ UNDP (2004).

¹⁰ World Bank (1996)

allocated to these subsidies could have been put to other uses for the benefit of the poor, but given the lack of an administrative capacity to help the poor in a more direct way, there is no doubt that the food subsidy policy has significantly contributed to poverty reduction, particularly in urban areas.

V- TRADE-OFFS BETWEEN GROWTH AND PRO-POOR GROWTH

Overall, public policy has targeted simultaneously growth and poverty alleviation. The government put in place integrated rural development programs that provided the infrastructure needed to develop agriculture and to interact with urban areas. It has also invested heavily in education, in health and birth control programs that induced a significant rise in the quality of human capital, both in rural and urban areas. The strategy of industrial development based on light manufacturing and export orientation as well as the development of tourism have had a high pay-off in terms of employment, particularly of low-skilled workers. The development of other capital-intensive activities, such as automobile assembly, hurt efficiency and growth and job creation and poverty reduction as well.

The education strategy pursued in the first two decades after independence (the sixties and seventies) has perhaps entailed a certain indirect trade-off between growth and poverty reduction. During those years the education system was very selective with respect to access to high school and even for passing from one class to another in primary school. The result was positive in terms of growth in the sense that the system produced a relatively competent civil service and a competent working force. On the other hand, by concentrating the educational resources on a small number and given that the poor had less chances to pass the tests than non poor students, the chances for social promotion were kept relatively low for the poor for some time.

Food subsidies are another instrument which may have involved a trade-off between poverty reduction and growth. At times these subsidies reached more than 4% of GDP, which was equivalent to 15% of total investment. For a long time targeting was a hotly debated issue but the government avoided taking any political risk by keeping prices of basic commodities very low and highly subsidized. Given the size of the subsidies their opportunity cost in terms of growth may have been very high. On the other hand, it is doubtful that the government had the capacity, at least until the mid-eighties, to replace this system efficiently in a way to compensate the poor or the potential poor so as to allow them not to fall in poverty if the subsidies were removed. The government attempt to remove them was met in 1984 by serious riots that threatened the stability of the country. Since the early nineties the government has been able to reform its policy towards better targeting of the poor, which has significantly eased the fiscal burden of subsidies, thus reducing the potential trade-off between poverty reduction and growth.

The Tunisian growth-poverty reduction experience may have also revealed another strategic trade-off between even regional development, therefore deeper poverty reduction in lagging areas but lower overall growth in the country, and uneven development but faster overall growth. Outside of agriculture, growth has indeed been concentrated in the coastal areas, partly for historical reasons, the infrastructure and education legacy of colonization, and partly due to deliberate choice made by the government since independence. The concentration of infrastructure and human capital in coastal areas has facilitated industrial and service development and thus the relatively rapid growth that the Tunisian economy experienced. At the same time this development strategy has resulted in a sharp reduction in urban poverty while rural poverty has also sharply declined but remained far above urban poverty. Had the government invested relatively more in infrastructure, education and health in the interior of the country than in coastal areas, rural poverty could have been reduced in greater proportions, but overall growth would have suffered due to the huge cost of meeting the infrastructure needs in the non coastal areas and to the relative immobility of human

capital from the coastal to the non coastal areas. Such a trade-off does not arise in the case of agriculture where the government has undertaken significant investment in infrastructure, particularly in building dams and rural roads, which has served both growth and poverty reduction. However, outside of agriculture such a trade-off could be important.

VI- CONCLUSIONS FOR POLICY MAKING

Tunisia's development strategy shows that with limited initial resources and poor natural endowments both a good growth performance and a significant reduction in poverty can be achieved in a relatively short period of time. Growth has been essential for the sharp reduction in poverty, providing jobs and the resources for the public treasury to spend on lagging regions and poor households. Not only the pace of growth but the type of growth strategy is crucial in the impact on poverty. A strategy based on comparative advantage and the intensive use of labor makes a difference. There have been some strategic mistakes, but Tunisia prepared the conditions for the development of labor-using industries and services, which provided the poor with job opportunities and income, directly, or indirectly through easing the pressure on the rural labor market.

Government commitment to fight poverty is crucial. The allocation of resources to the development of infrastructure in rural areas, and in urban poor areas as well, and the spread of education in rural areas, requires strong political will and commitment. The Tunisian government intends to strengthen in the future the needy families program, which already covers a large number of households. When this program arrives to the stage where most if not all poor are surveyed and their list updated, untargeted subsidies can be removed, which will free resources for growth.

Population growth has a significant bearing on poverty. With an appropriate policy of birth control Tunisia has been able to reduce population growth significantly, which certainly has impacted positively on poverty reduction. Improvements in skills through education have also been instrumental in poverty alleviation, particularly when they are extended to the female population which has increased its labor market participation at all levels. It is however, important to emphasize that primary education is not sufficient to move out of poverty and that the education effort should aim at the secondary level in rural as well as in urban areas. It should also improve the efficiency and quality of vocational training in order to make it more attractive to the youth, particularly that issued from low-income background, and to create for them promising job opportunities. The incidence of poverty in Tunisia is currently low in spite of a relatively high rate of unemployment, hovering around 15 percent for the last two decades and reaching much higher rates among youth and first time job seekers. High unemployment persists in spite of relatively high growth. In the future low poverty cannot be maintained unless job creation is accelerated. Improvements in training and the reduction of mismatch between skills and the needs of the labor market are at the heart of addressing persistent unemployment.

Changes in the international environment offer both opportunities and challenges for growth and poverty reduction in Tunisia. Being close to large developed countries such as the EU countries, Tunisia has benefited from access to their labor markets and important remittances that have contributed to poverty alleviation. Deeper integration with the EU through liberalization of services and internal reforms could lead to faster growth and poverty alleviation. However, major challenges lie ahead. Since Tunisia's manufacturing is largely concentrated in textiles and garments, the dismantling of the MFA presents a big challenge both in terms of growth and poverty alleviation. In addition, liberalization of trade in agriculture may hurt poor farmers and should therefore be accompanied by compensatory measures and appropriate policies to facilitate the ensuing redeployment of productive resources.

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ANNEXES

Annex I - Detailed Growth Incidence Curves

Figure 1a- Growth incidence curve for all Tunisia (1980-85)

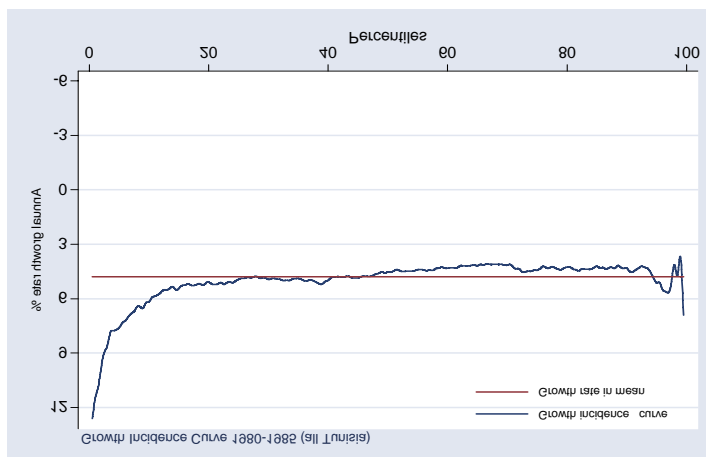


Figure 1b- Growth incidence curve for urban Tunisia (1980-85)

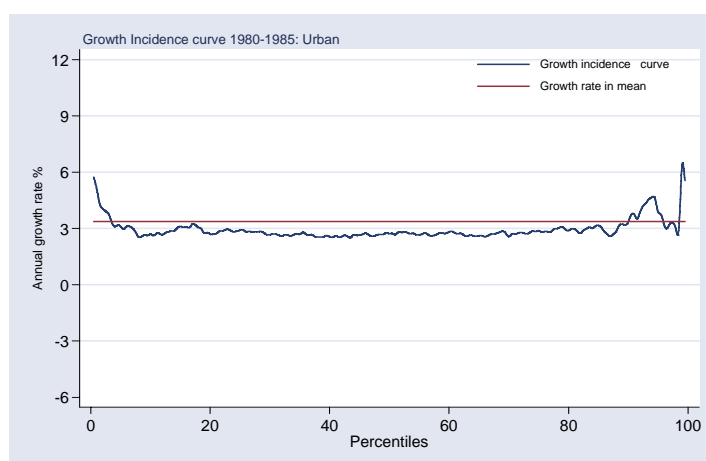


Figure 1c- Growth incidence curve for rural Tunisia (1980-85)

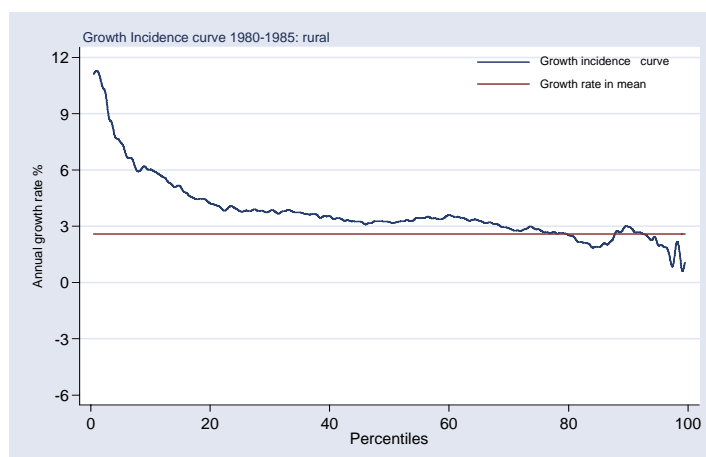


Figure 2a- Growth incidence curve for all Tunisia (1985-90)

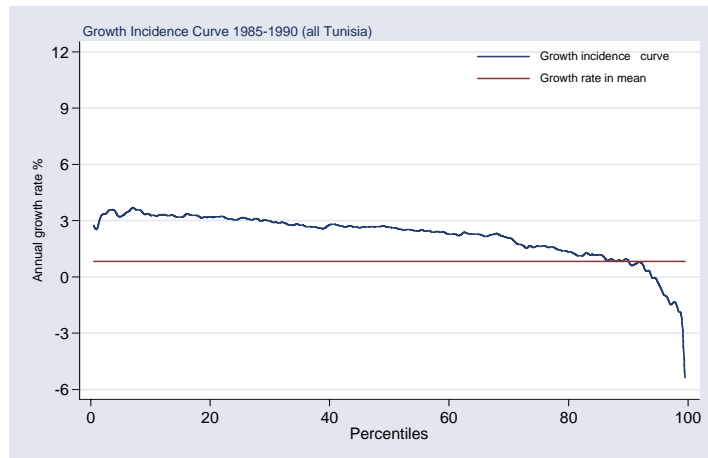


Figure 2b- Growth incidence curve for urban Tunisia (1985-90)

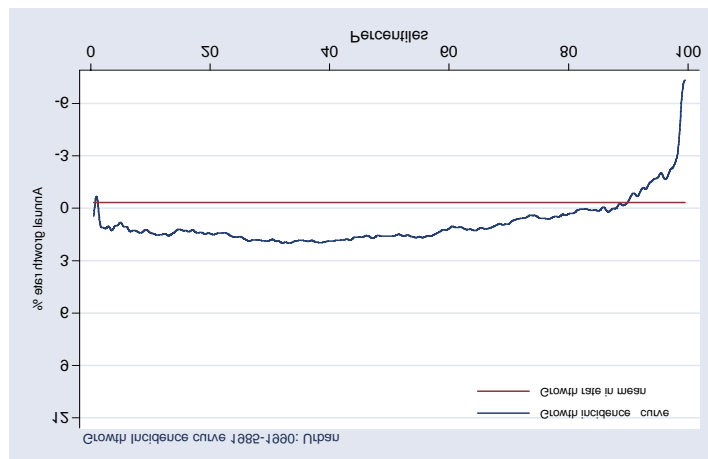


Figure 2c- Growth incidence curve for rural Tunisia (1985-90)

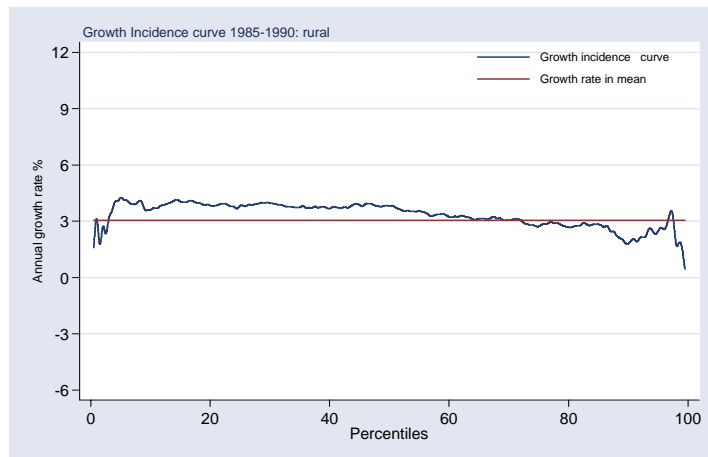


Figure 3a- Growth incidence curve for all Tunisia (1990-95)

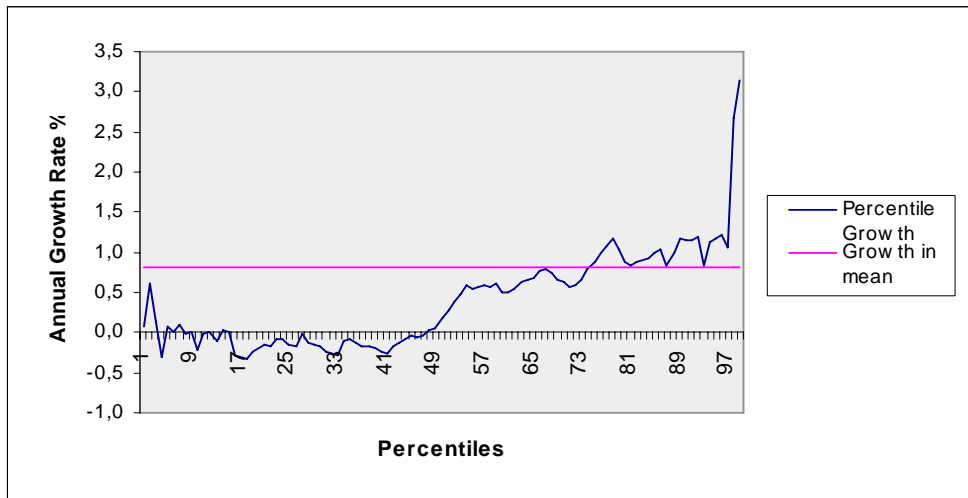


Figure 3b- Growth incidence curve for urban Tunisia (1990-95)

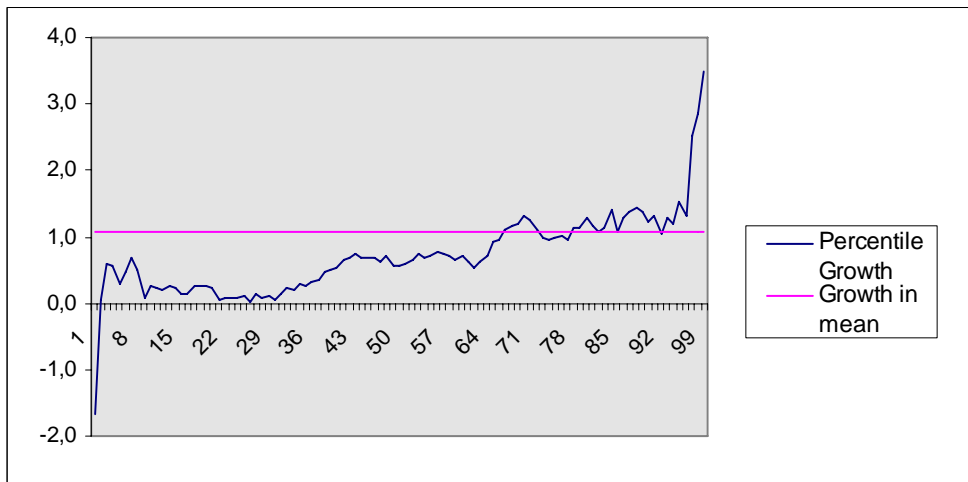


Figure 3c- Growth incidence curve for rural Tunisia (1990-95)

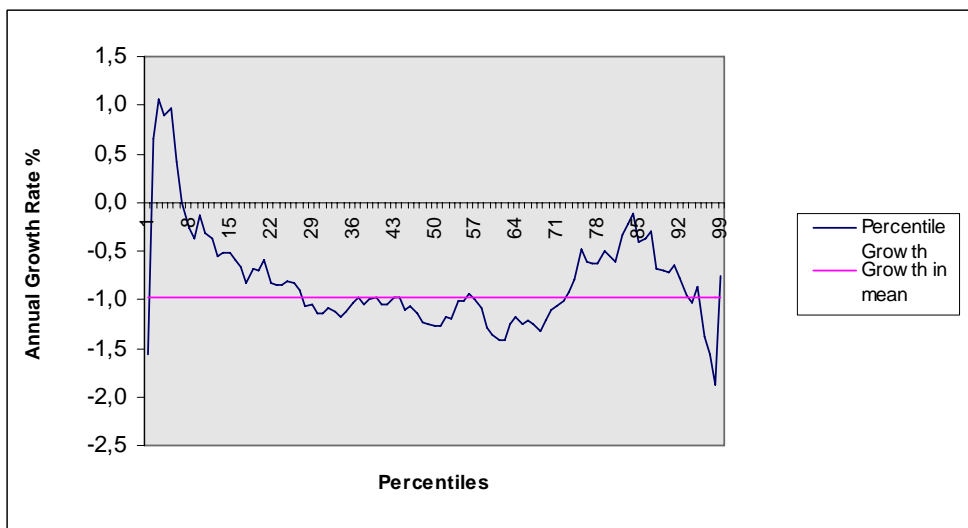


Figure 4-a_ Growth incidence curve for all Tunisia (1995-00)

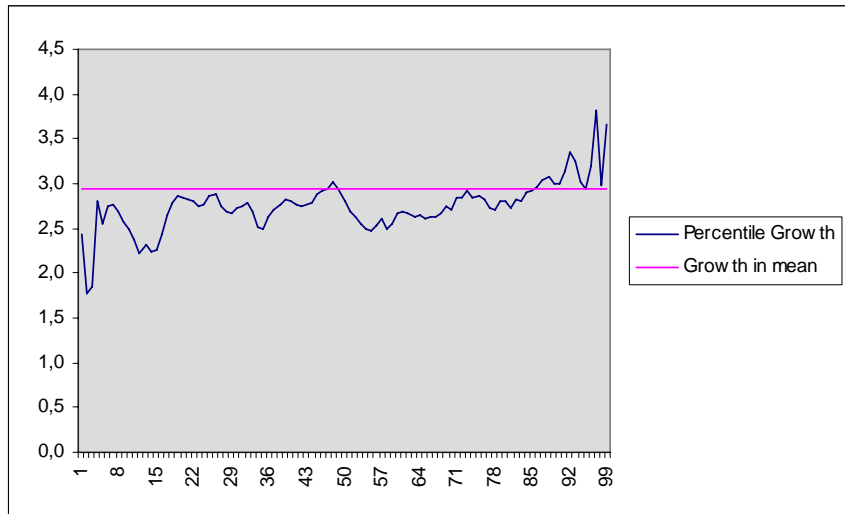


Figure 4-b_ Growth incidence curve for urban Tunisia (1995-00)

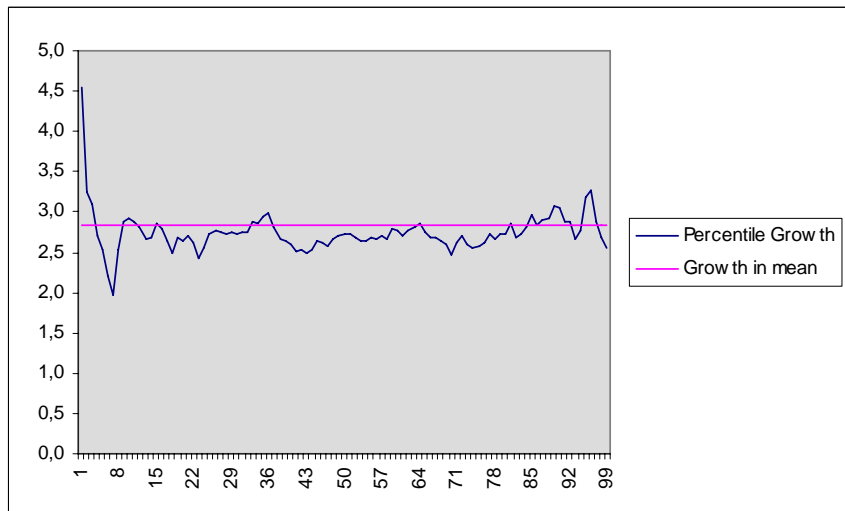


Figure 4-c_ Growth incidence curve for rural Tunisia (1995-00)

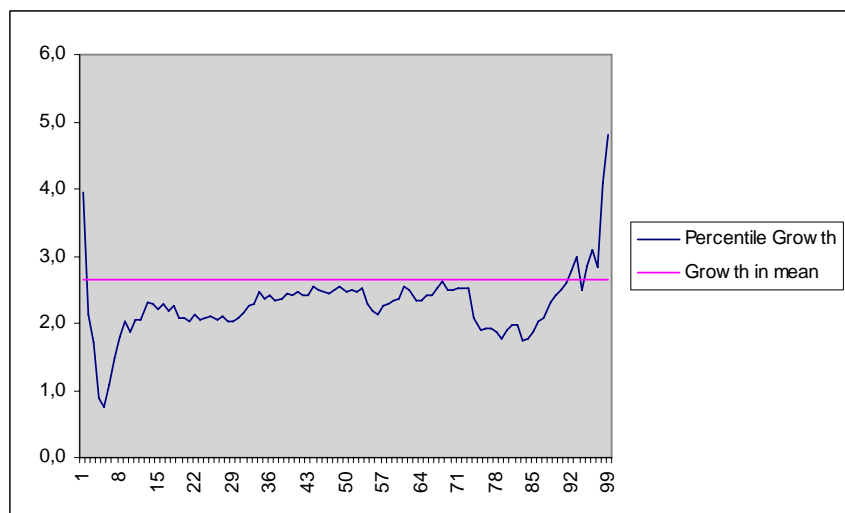


Figure 5-a- Growth incidence curve for all Tunisia (1990-00)

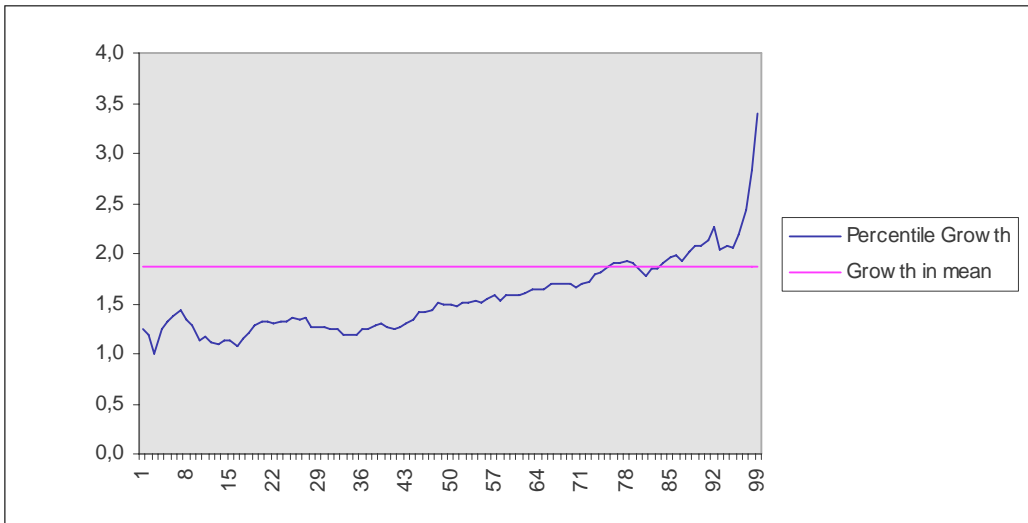


Figure 5-b- Growth incidence curve for urban Tunisia (1990-00)

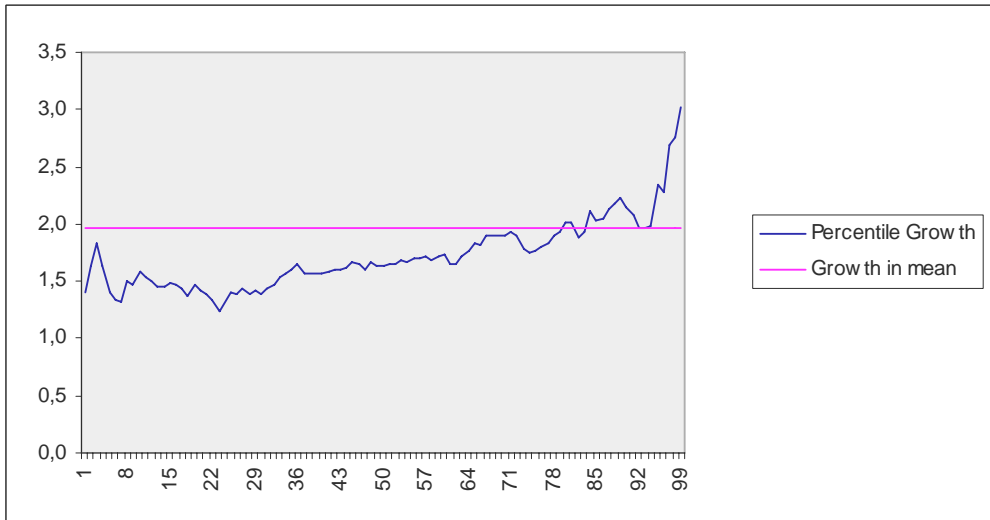
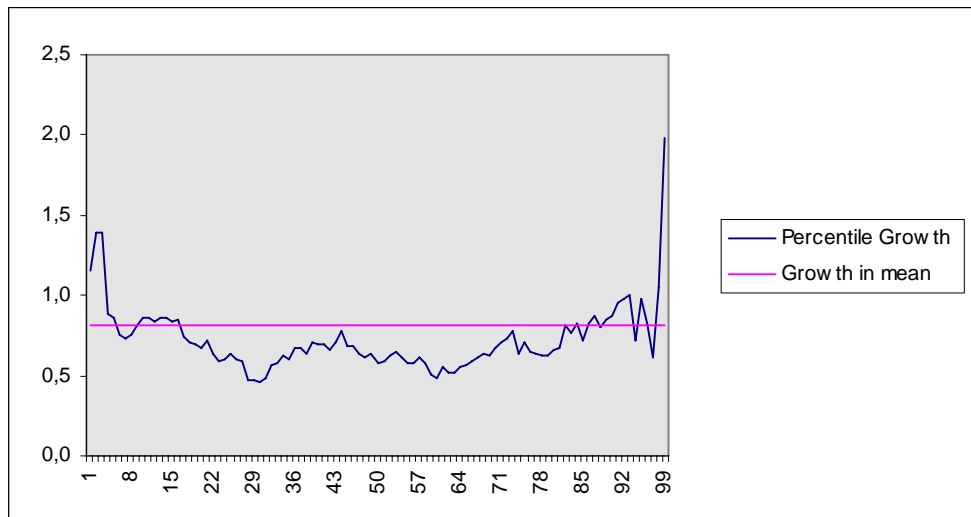


Figure 5-c- Growth incidence curve for rural Tunisia (1990-00)



Annex 2- Statistical Tables

Table A1- Distribution of Consumption Expenditures, Education of Head of Household and Enrolment Rates in Tunisia 1990-2000 (Percentage of corresponding population)

Year	NO EDUCATION		PRIMARY		SECONDARY		HIGHER		ENROLLMENT RATE (6-18)	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Urban										
First decile	66.5	53.8	23.7	41.0	0.9	5.2	0.0	0.0	73.9	78.2
All urban	36.3	27.0	32.0	39.8	21.8	26.3	5.7	7.3	79.6	82.0
Rural										
First decile	70.4	59.7	20.3	35.6	2.9	4.7	0	0	54.3	67.7
All rural	60.3	53.2	26	37.1	6.4	9	0.5	0.8	60.4	69.9
All Tunisia										
First decile	70.2	56	20.9	39	3.2	5	0	0	56.5	70.6
All	46	36.7	29.6	38.8	15.5	19.9	3.6	4.6	71.4	77.2

Source: HCBS (1990, 2000), INS, Tunisia

Table A2- Distribution of rural households by type of occupation and decile of consumption expenditures(1990;2000)
(Percentage distribution of the population)

OCCUPATION	1990			2000		
	FIRST DECILE	SECOND DECILE	TOTAL	FIRST DECILE	SECOND DECILE	TOTAL
High- Level						
Professionals	0	0	0.7	0	0	1.1
Middle- Level						
Professionals	0	0	1.2	0	0	1.6
Other White Collar						
Employees	0	0	1.5	2	2.6	4.1
Employers: Industry;						
Commerce and services	0	0.1	0.3	1.2	0.5	1.4
Self employed: Industry,						
Commerce or services	7.1	4.8	8.2	4.9	9	7.9
Non agricultural						
Laborers	31.3	23.4	22.6	28.4	25	23.3
Land holders	12	17.1	31.9	20.8	23.7	26.5
Agricultural laborers	33	32.3	19.5	20.6	20.9	15
Retired						
Other inactive				0.9	2.1	3.4
Inactive						
Other inactive				3.8	3.4	4
Inactive						
Inactive	5	4.5	5.4			
Absent						
Absent	5.2	9.6	6.8	11.9	10.3	9.6
Unemployed						
Unemployed	6.4	8.2	1.9	5.5	2.5	2.1
TOTAL						
TOTAL	100	100	100	100	100	100

Source: Household Consumption Surveys, 1990, 2000, Institut National de la Statistique

Table A3- Distribution of all Tunisian households by type of occupation and decile of consumption expenditures(1990;2000)
(Percentage distribution of the population)

	<u>1990</u>			<u>2000</u>		
	FIRST DECILE	SECOND DECILE	TOTAL	FIRST DECILE	SECOND DECILE	TOTAL
High- Level Professionals		0	4.5	0	0	6.4
Middle- Level Professionals	0	0	4.3	0	0	4.4
Other White Collar Employees	0	0	4.4	0	0	7.1
Employers: Industry; Commerce and services	0	0	1.3	1.4	0.8	3
Self employed: Industry, Commerce or services	7.2	7.8	12.2	6.4	11.1	9.7
Non agricultural Laborers	34.7	33	31.6	35.5	39.2	27.8
Small holders	10.7	12.9	15.6	16.4	16.7	12.4
Agricultural laborers	31.3	25.3	9.7	18.6	14.7	7.4
Retired				2.5	3.9	10.4
Other inactive				3.9	3.5	4.3
Inactive	5.3	5.5	9.8			
Absent	4.6	8.1	5.2	10.4	7.8	5.8
Unemployed	6.2	7.4	1.4	4.9	2.3	1.3
TOTAL	100	100	100	100	100	100

Source: Household Consumption Surveys, 1990, 2000, Institut National de la Statistique

Table A4- Sector of occupation and Percentage Poverty Headcount (1990,2000)

Sector of activity	LARGE CITIES		OTHER URBAN		RURAL	
	1990	2000	1990	2000	1990	2000
Agriculture and Fishing	2.5	0	3.7	2.9	13.1	7.6
Manufacturing	1.3	1.3	2.9	1	16.5	7
Construction	11.1	0.7	9.6	7.6	17.3	14.7
Commerce	2.1	0.3	3.4	2.1	7.6	6
Transport and Communication	1.3	0.7	0	2.9	2	3.4
Hotels, Entertainment	-	-	3.4	-	7	-
Services	2.4	-	3.3	-	17	-
Mining and Energy	0	-	8.7		4.5	
Unemployed	-	-	-	11.9	-	33.4
Total	3.8	0.8	4	2.5	13.1	8.3

Source: Household Consumption Surveys, 1990, 2000, Institut National de la Statistique

Table A5- Land Distribution in Tunisia (1961-1995)

Size	1961/62			1986			1994/95		
	% of number of farmers	% of land	Average size (ha)	% of number of farmers	% of land	Average size (ha)	% of number of farmers	% of land	Average size (ha)
0-5 ha	41.0	6	2.4	46.2	7.5	2.2	41	9	1.9
5-10 ha	22.0	10	7.3	20.8	11.1	7.3	22	12	7
10-50 ha	32.0	44	21.5	29.4	46.1	21.5	32	42	19.6
50-100 ha	3.0	11	64.8	2.3	12.0	71.0	3	12	64.5
More than 100 ha	2.0	29	299.8	1.3	22.9	244.1	2	25	325.3
Total	100.0	100	15.9	100.0	100.0	13.7	100	100	11.2

Source: Ministry of Agriculture (Tunisia), « Enquête sur les structures des exploitations agricoles 1994/95 »

Table A6- Multiple activities by farm size (1994/95)

Farm size	TOTAL NUMBER OF FARMERS		FARMERS WITH MULTIPLE ACTIVITIES	
	Number	Percentage in total	Number	Percentage in total
0 - 5 ha	250 900	53	125 800	50
5 - 10 ha	91 200	20	37 200	40,7
10 - 20 ha	71 200	15	25 600	35,9
20 - 50 ha	42 800	9	12 600	29,4
50 -100	10 000	2	1 800	18
More than 100 ha	4 400	1	800	19,5
Total	471 000	100	203 000	43,2

Source: Ministry of Agriculture (Tunisia), « Enquête sur les structures des exploitations agricoles 1994/95 »

Table A7- Employment status and sector of occupation of the active rural population (1990-2001) (in percentages)

	1994		1997		1999		2000		2001	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
Agricultural		48.2	428122	40.1	478171	41.9	478229	42.4	510974	45.3
Other activities		30.6	450424	42.2	457171	40.0	463401	41.1	445698	39.5
Unemployed		21.2	189953	17.8	206631	18.1	186136	16.5	172078	15.2
Total		100.0	1068499	100.0	1141973	100.0	1127766	100.0	1128750	100.0

*Source : 1994: Population Census, Institut National de la Statistique
1997-2001: Employment surveys, Institut National de la Statistique*

Table A8- Growth and Sectoral Composition of Employment (1962-2000)

Sector	1962-69		1970-80		1980-00		1995-00	
	Annual Growth	Share in Total	Annual Growth	Share in Total	Annual Growth	Share in Total	Annual Growth	Share in Total
Agriculture	0.0	45.9	0.1	38.7	0.2	27.3	0.1	23.0
Manufacturing	2.2	14.4	5.6	17.5	3.5	23.1	3.1	24.2
Textiles, clothing & leather	2.2	9.0	4.2	10.4	2.7	11.5	2.7	11.5
Non manufacturing Industry	1.1	10.9	3.9	11.9	1.1	10.9	1.6	9.8
Construction	0.8	8.4	4.5	9.5	1.4	9.0	1.9	8.3
Non government Services	1.4	20.1	2.8	20.8	4.2	24.5	4.8	28.2
Tourism	26.0	0.4	9.8	1.3	5.6	2.1	5.2	2.7
Government services	4.4	8.7	4.8	11.2	3.4	14.2	2.3	14.8
Total employment	1.1	100	2.6	100	2.5	100	2.6	100
Total (agriculture exc.)	2.0	54.1	4.2	61.3	3.3	72.7	3.4	77.0

Source: Institut d'Economie Quantitative