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Assessing Labor Market Conditions in Madagascar: 2001-2005¹

Introduction & Summary

In a country like Madagascar where seven out of ten individuals live below the poverty line (INSTAT, 2006), and where the poor derive most of their income from their own unskilled labor, understanding employment and earnings conditions is therefore essential to understanding poverty. Improving these conditions not only has implications for poverty reduction. The functioning of the labor market also has important consequences for economic efficiency and growth. Well functioning labor markets can facilitate growth through the efficient allocation of resources, as well as allow the poor to share in opportunities created by economic growth.

This brief highlights the main findings of a study that assesses the labor market conditions in Madagascar between 2001 and 2005 (Stifel et al., 2007). The key messages coming out of the analysis are:

- Workforce participation is high and unemployment is low in Madagascar.¹ Given low earnings and high poverty rates, policy issues revolve around creating “good” jobs rather than creating *any* jobs. “Good” jobs are those for which earnings are high and work conditions are good.
- Although women now make up half of the workforce, men have greater access to higher paying jobs.
- Children’s labor may be detrimental to their schooling, but there have been improvements. Employment rates among children of age 6-14 have fallen by 23 percent to 18.8 percent, and more children who are working also attend school (46 percent).
- There has been an overall shift of labor out of industry and services into agricultural activities. This shift, however, is largely a result of employment changes among the non-poor responding to conditions in the commercial economy. The poor receive an increasing share of labor income from informal service sector employment.
- More than half of the workforce has no formal education. Over 60 percent of formal sector firms in a recent survey consider this to be an impediment to their growth.
- Although returns to education were lower in 2005 than in 2001, investment in education continues to improve access to high quality jobs and higher earnings.
- Demand for labor in the formal sector is constrained by non-labor related issues such as macroeconomic stability, access to financial services, and others.
- The agricultural sector is by far the dominant sector in terms of employment, but labor earnings are lowest in this sector. Over one third of workers in this sector do not earn enough to keep themselves out of poverty, much less their families.
- Policy challenges include reducing labor supply (skill quality) and demand (obstacles to growth) constraints in the formal sector so that new high-quality jobs can be created there, as well as improving earnings in the rural areas through investments in the agricultural sector and through the non-farm sector.

¹ Definitions of technical terms appear in the appendix.

Table 1: Basic labor market indicators for Madagascar, 2001-2005

| Indicator | Level | | Change | |
|------------------------------------|-------|------|----------|---------|
| | 2005 | 2001 | Absolute | Percent |
| Employment and unemployment | | | | |
| Labor Force | 88.1 | 83.5 | 4.6 | 6% |
| Employment-to-population ratio* | 85.8 | 82.5 | 3.3 | 4% |
| Unemployment rate | 2.6 | 1.2 | 1.4 | 113% |
| Child labor rate | 18.8 | 24.3 | -5.5 | -23% |
| Women's Employment Rate | 83.2 | 77.8 | 5.4 | 7% |
| Poverty rate among unemployed | 42 | 44 | -1.5 | -3% |
| Wage and salaried workers | | | | |
| Median monthly earnings** | 71.5 | 88.1 | -16.6 | -19% |
| Earnings inequality (Gini) | 0.45 | 0.49 | 0.0 | -9% |
| Low earnings rate*** | 18.6 | 15.8 | 2.9 | 18% |
| Poverty rate | 47 | 33 | 14.0 | 42% |
| Non Wage workers | | | | |
| Median monthly earnings** | 32.2 | 25.3 | 6.9 | 27% |
| Earnings inequality (Gini) | 0.47 | 0.61 | -0.1 | -23% |
| Low earnings rate*** | 36.6 | 50.9 | -14.3 | -28% |
| Poverty rate | 69 | 77 | -8.3 | -11% |
| All workers | | | | |
| Median monthly earnings** | 35.3 | 30.8 | 4.5 | 15% |
| Earnings inequality (Gini) | 0.50 | 0.62 | -0.1 | -19% |
| Low earnings rate*** | 33.8 | 44.1 | -10.3 | -23% |
| Poverty rate | 65 | 69 | -4.0 | -6% |

* Employed if has a permanent job or worked at least one hour in the week prior to the survey

** Earnings levels for 2001 are expressed in thousands of MGA and divided by 0.6476

(= 197,720 / 305,300 = 2001 poverty line / 2005 poverty line) in order to make comparison between 2005 and 2001

*** Low earnings line: Official national poverty line 305,300 MGA per year for 2005

Before turning to a more detailed description of these findings, however, a word of caution needs to be sounded with regard to interpreting trends. The household survey data² used for the analysis were collected in the years 2001 and 2005. As such, these surveys provide snapshots of circumstances just prior to the 2002 political crisis and three years after the crisis. Consequently, observed trends may be the product of both the political crisis and on-going structural changes in the economy, which are not necessarily working in the same direction.

Employment Patterns

Workforce participation in Madagascar is high, especially in rural areas. 85.8 percent of the population report some form of employment in 2005. This is an increase of 3.3 percentage points from 2001. With an employment rate of 90 percent, up from 88 percent in 2001, the vast majority of rural residents are economically active. While urban employment also grew, it remains lower than in rural areas at 72.3 percent.

Much of the increase in overall employment

has come from growth in the number of women in the work place. With female employment growing from 77.8 percent to 83.2 percent, relative to male employment rising from 87.5 to 88.6, women now account for half of the working population. This convergence is primarily rural, as the share of women among the employed remained roughly 47 percent in urban areas.

The agricultural sector accounts for over 88 percent of rural employment and 45 percent of urban employment. Although the agricultural sector generates only 34.3 percent of total output, it employs 80.1 percent of the working population. By contrast, the service sector employs only 17.4 percent, but accounts for 53.0 percent of national output. Finally, the industrial sector generates 12.7 percent of total output, but employs only 2.5 percent of the working age population.

Employment in the agricultural sector increased mainly among the non-poor between 2001 and 2005, while employment in services increased among the poorest. The structure of employment changed substantively since 2001. The share of workers in the agricultural sector has risen by 6.2 percentage points at the expense of both services and industry. It is the non-poor whose employment in agriculture has risen possibly in response to negative

² *Enquête Périodique auprès des Ménages* (EPM) collected by the Institut National de la Statistique (INSTAT).

conditions in the commercial economy. While employment among the poor in the agricultural sector remained relatively unchanged, the percent of the non-poor employed in agriculture rose from 38.2 percent to 62.5 percent. Employment in services among the poor rose (8.6 percent to 11.3 percent) and was driven by jobs in public works and commerce. Job losses in the industrial sector were concentrated in textiles and energy.

Over 85 percent of workers in Madagascar are employed in non-wage activities. And these numbers have risen since 2001. Conversely, not only did the share of those employed in wage and salaried positions fall (18.3 percent to 14.9 percent), but the absolute number in this category also fell from 1.29 million to 1.17 million. This followed from a loss of non-agricultural wage employment, which more than offset the increase of agricultural wage employment (from 2.3 percent to 3.1 percent of total employment).

Non-wage labor is predominantly agricultural. Nearly nine out of ten non-wage workers are employed in agricultural activities (including livestock rearing). This is due to the importance of this sector in rural and secondary urban areas. Consistent with the observed overall employment trend out of industry and services into agriculture, the number of individuals employed in non-wage agriculture activities rose by 30.2 percent between 2001 and 2005.

Large urban areas are different from the rest of the country. The patterns and changes in employment status have not been uniform across the country. Large urban areas differ from the rest of the country with regard to wage and non-wage employment patterns. For example, the majority of those employed in large urban centers³ earn their living from wage employment (65.9 percent). Further, the number of wage employed in large urban areas grew by nearly 50 thousand. This growth was driven by an increase in the number of private sector non-agricultural jobs.

Most of jobs do not require substantial skills. Of the 14.9 percent of the workforce with wage and salaried jobs, 55.1 percent are employed in unskilled positions. In large urban areas, where 65.9 percent of the workforce receives a wage, 42.8 percent of wage workers are unskilled. In secondary urban this figure is 48.8 percent. Not surprisingly, in rural areas, unskilled labor accounts for 65.6 percent of wage labor. Nearly two-thirds of women with wage

employment hold unskilled positions, while just under half of men do so.

The informal sector dominates the labor market in Madagascar. A conservative estimate places 64.5 percent of the 1.2 million wage laborers in the informal sector. Considering the total workforce, including non-wage workers, approximately 95 percent of the 8.3 million working age adults are informally employed.

Most workers in Madagascar have no formal education. More than half of the working-age employed Malagasy work force has no formal education, while 30 percent has primary education, and 15 percent has secondary education. Further, three-quarters of entrants into the workforce are uneducated. The urban workforce is better educated than the rural workforce. Employment rates are highest among those without any education (93.2 percent), and lowest among those with upper secondary education (64.6). In addition, employment rates fall steadily as educational attainment levels increase up through secondary education.

Uneducated workers are more likely to be employed in agriculture. As education levels increase, individuals shift out of agriculture and into industry and services, though much more rapidly into the latter – the percentage of the workforce in agriculture decreases persistently with education levels (from 89.8 percent to 14.6 percent), while the percentage in industry (from 1.0 percent to 12.8 percent) and services (from 9.1 percent to 72.6 percent) increase.

Open unemployment is low in general, though it may be problematic in urban areas. Although unemployment in Madagascar has been rising, it remains low at 2.6 percent. Open unemployment rates are three times greater for those in the richest household expenditure quintile compared to those in the poorest quintile (5.1 percent compared 1.6 percent, respectively). In the same manner, open unemployment is largely an urban phenomenon and is concentrated among those with higher levels of education. Unemployment rates of 12.0 percent in large urban areas, and 3.5 percent in secondary cities, are substantially higher than the 1.4 percent in rural areas. Whereas Glick (1999) found that urban unemployment rates in 1993 were highest among younger age groups, in 2005 the highest rates were found among older age groups who primarily lost high skilled wage jobs. Nonetheless, nearly a quarter of young urban residents (21-30) with post secondary education are unemployed.

³ These areas are made up of the provincial capitals.

Quality of Employment

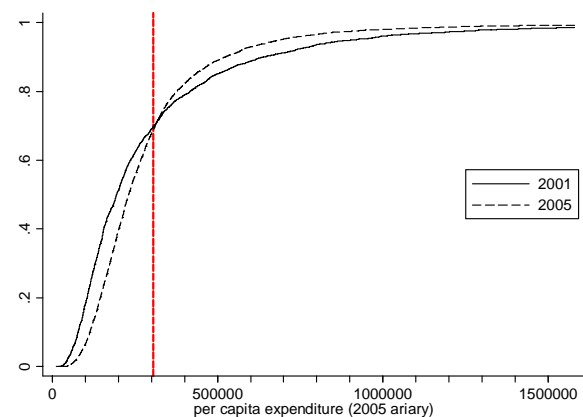
The majority of workers in Madagascar can be characterized as “working poor.” In other words, individuals are poor despite having jobs, not because they lack them. Although 86 percent of the working age population was gainfully employed in 2005, 65.4 percent of them live in poverty. Despite improvements since 2001, job quality remains low. Median monthly earnings for all adult workers were Ariary 35,600 (approx. US\$ 17). Policy issues thus revolve around creating “good” jobs rather than creating any jobs.

Low quality jobs, defined by low earnings (i.e. ones for which earnings fall below the poverty line), are found mostly in agriculture. The highest percentage of low earners is in the agricultural sector (37.5 percent), which is over three times as great as among wage workers (11.8 percent). Nearly three quarters of low earnings among wage workers can be attributed to low productivity as opposed to hours worked. Further, poverty rates among low earners are higher than among all workers, indicating that low earnings are a major contributor to poverty in Madagascar, as opposed to low employment.

Nonetheless, there were improvements in agricultural earnings. Between 2001 and 2005, agricultural earnings improved while both wage and non-wage non-agricultural earnings deteriorated on average. Median agricultural earnings rose by 31 percent, while non-wage and wage real non-agricultural earnings fell 23 percent and 12 percent, respectively.

The improvement in low-paying agriculture that has been accompanied by a deterioration in higher paying non-agriculture, has resulted in a compression of the overall distribution of household incomes. As illustrated in Figure 1, although there was little change in the poverty rate, those households with expenditure levels below the poverty line witnessed increases in their household expenditure levels. These are the households that benefited from the improved agricultural earnings. Conversely, non-poor households saw their expenditure levels fall in real terms as a result of lower non-farm earnings.

Figure 1: Distributions of Per Capita Expenditures



Source: Amendola and Vecchi, 2007.

The formality status of jobs is also an important indicator of higher job quality. Wage workers in the private formal sector have median earnings that are 60 percent higher than for informal wage workers. Further disaggregation of won-wage employment by formality is also revealing. Median earnings among employees in registered non-farm enterprises earn more than two and a half times more than those working in unregistered enterprises.

Access to “good” jobs depends on educational attainment. Workers with little or no education are primarily found in the lowest paying sectors. Of those workers with no education, 86 percent are employed in agricultural activities, while 76 percent of those with only a primary education are in this sector. Less than two percent without any education are employed in the formal sector. This evidence thus suggests that individuals with low levels of education are vulnerable. Unless their skills are developed, this set of workers which make up more than half of the workforce, are likely to remain in low paying jobs with little promise for access to good jobs.

Despite equal access to the general workforce, men have greater access to “good” jobs than women. Men and women have similar non-wage agricultural earnings, but men fare better than women in terms of earnings in every other employment category. Women tend to be employed more in agriculture and the informal sector where earnings are relatively low, while men tend to have higher rates of employment in the formal sector where earnings are relatively high. Further, for those women who are employed in the formal sector and/or have better wage jobs, their earnings fall below those of men in the same sectors on average.

Over a quarter of the employed work in more than one job, and they do so primarily because earnings are low, not because employment is seasonal. Temporary employment and holding multiple jobs can be an indicator of vulnerability. In Madagascar, 28.9 percent of the working age population has more than one job. This is more than a 100 percent increase from the 13.3 percent that reported holding multiple jobs in 2001. The percentage with temporary or seasonal employment is nearly half of the multiple job holding rate (14.8 percent), suggesting that it is low earnings, not the lack of opportunity to work throughout the year, that is driving much of the decisions to work at more than one job.

Households increasingly rely on agriculture for most of their labor earnings. Agriculture accounts for an average of 68.6 percent of household labor earnings in Madagascar. The second largest source is from informal non-farm enterprises (11.2 percent). The formal sector accounts for 8.7 percent of household earnings. Agriculture has become a more important source of household earnings while formal sector earnings have fallen.

Poorer households, however, have begun turning to informal employment in the service sector. The structure of household earnings changed in different ways for poor and non-poor household between 2001 and 2005. Agriculture has become less important as informal non-agricultural earnings (wage and non-wage) and service sector earnings have picked up for poorer households. For richer households during this time period, the dominant income source shifted from non-agricultural wage employment to agriculture.

Policy Implications

Given high employment rates, low earnings and high poverty rates, policy issues in Madagascar revolve around improving the quality – not just the quantity – of employment. This can be achieved either by fostering an environment that is conducive to creating new jobs in the high-paying formal sector, or by improving the quality of current jobs in the informal or non-wage sectors, or ideally both.

With regard to the formal sector, there are both supply and demand issues that affect employment and earnings outcomes. On the labor supply side, the quality of labor can limit growth. A 2005 World Bank Investment Climate Assessment (ISA) survey found that for over 60 percent of formal sector firms in Madagascar (i.e. those providing higher

quality jobs), the limited supply of skilled and/or trainable labor was an impediment to their operation and growth.

Efforts to improve specific skills through vocational training as well as efforts to develop generalized skills through general education are likely to pay off. Not only are such skills found to increase the likelihood that individuals acquire quality wage jobs, but they also are associated with higher earnings within this sector – those with lower secondary education earn 48 percent more than those with no education, while the premium is 69 percent for those with upper secondary education.

On the demand side, non-labor related constraints on formal sector growth can choke demand for labor in this high paying sector. For example, issues related to macroeconomic stability, access to financial services, corruption, regulatory burden and uncertainty, and electricity currently rank higher among difficulties faced by the business community in the ICA survey than do labor-related issues. Improvements in these areas can set the conditions necessary for employment generating growth.

With regard to improving the quality of current jobs, an important sector in which to focus is the rural sector given the concentration of labor there. Efforts to improve agricultural productivity, which has stagnated over the last 20 years, will go a long way to improving the livelihoods of rural residents who rely largely on the one asset that they own in abundance – their own unskilled labor. Further, the rural non-farm sector is an important pathway out of poverty. Addressing the obstacles that rural workers face in this sector (e.g. insufficient skills, and lack of credit and information; see Stifel, 2007), can contribute not only to the growth of national income, but to absorbing a growing rural labor force.

Appendix - Definitions

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| Employed: | Has a permanent job or worked at least one hour in past week. |
| Labor Force: | Working age (15-64) individual employed or actively looking for a job. |
| Unemployed: | In the labor force without a job. |
| Unemployment Rate: | Number of unemployed divided by number in labor force |
| Wage Employment: | Individual works for a wage or a salary. |
| Non-Wage Employment: | Individual works for a wage or a salary. |
| Informal Employment: | Employer does not provide for a pension or pay social security or pay/provide for health expenses. |

“Good” jobs: Jobs that generate enough earnings to bring a standard family out of poverty, and that have good work conditions. At the lower bound, “good” jobs must thus provide individuals with earnings that are higher than the poverty line. Given the heterogeneity of employment types, however, a precise definition of what constitutes a “good” job is difficult at best. In this analysis, “better” jobs are roughly measured by higher monthly earnings. In addition, formality status may indicate higher job quality, though this is not necessarily the case given the potential for dualism in the informal sector (Fields, 1990).

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ⁱ This policy brief was prepared by David Stifel (Lafayette College).