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**ELR-led economic development: a plan for Tunisia**

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**Working Paper No. 499**

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## **ELR-led Economic Development: A Plan for Tunisia**

by

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## **ELR-led Economic Development: A Plan for Tunisia**

by Fadhel Kaboub

### **ABSTRACT**

This paper establishes the financial feasibility of an employer of last resort (ELR) program in a small developing country like Tunisia, and argues that an ELR-led economic development policy is vastly superior to the traditional import substitution industrialization (ISI), export-led, and FDI-led development models, all of which Tunisia has adopted without much success in reducing unemployment. Despite outperforming its peers in terms of macroeconomic stability, Tunisia's official unemployment rate still hovers around 15 percent, with two-thirds of first-time job seekers having university degrees. The paper demonstrates that a well-targeted ELR program can be gradually introduced over a six-year period to remedy this problem by reclaiming sovereignty over the country's domestic monetary and fiscal policies under a floating exchange rate regime. The estimated ELR net wage bill would be around 2.7 percent of GDP; however, spending by ELR workers would offset program costs, and the net effect on GDP would be an increase of about 3.6 percent. The paper concludes by proposing a set of complementary policy reforms that must accompany an ELR program to ensure long-term growth sustainability along with full employment and price stability.

**Keywords:** Tunisia, ELR, Full Employment, Unemployment, Job Creation, Functional Finance, Flexible Exchange Rate, Development, Export-led Growth, FDI-led Growth, ISI

**JEL Classifications:** B5, O11, O23, O55, E24, E62, H63

## INTRODUCTION

Seven decades have now passed since the publication of *The General Theory of Employment, Interest, and Money* (1936) by John Maynard Keynes. At that time, the issue of the day was persistent mass unemployment during the Great Depression to which neoclassical economics offered no solutions. Keynes's call for an active role for the government in economy fell on deaf ears in policy arenas that were accustomed to laissez-faire economics. Western economies continued to muddle through until WWII gave the United States government no choice but to engage in massive government spending which helped pull the economy out of the Great Depression. The end of WWII six decades ago also marked the birth of the Bretton Woods system with the creation of the IMF and the World Bank, and also the passing of the Employment Act in the United States. Those events expressed an implicit commitment to full employment and price stability, and the recognition of state-led economic growth as a legitimate economic model that many countries followed for decades.

It was in this context that the Employer of Last Resort (ELR) literature began to blossom in the 1960s with the work of Hyman Minsky who argued that the government should act as employer of last resort to ensure an infinitely elastic demand for labor, thus creating an automatic stabilizer mechanism through which the size of public sector employment would expand during recessions to absorb unemployed labor, and conversely it would shrink during economic expansions to allow the private sector access to labor power at a premium above the ELR-wage. Even though neither Keynes's nor Minsky's policy prescriptions were never full implemented, one could safely argue that the post-WWII era to the early 1970s is to be remembered for its noticeable Keynesian policy stance, both in developed and developing countries. The rebirth of laissez-faire economics and the rise of neoliberal politics since the 1980s have significantly undermined the possibility of a true ELR program implementation, especially in developing countries.

This paper will establish the financial feasibility of an ELR program in a small developing country like Tunisia, and will argue that an ELR-led economic development policy is vastly superior to the traditional import substitution industrialization, export-led, and FDI-led development models, all of which Tunisia has adopted without much success at reducing unemployment. This paper will be organized in three sections. First, an overview of the ELR

policy is presented. Second, a brief presentation of the economic development strategies implemented in Tunisia since independence in 1956 will be given, with a particular attention to their impact on employment. Third, an ELR policy proposal for Tunisia will be laid out along with a financial assessment of the cost of the program and its impact on GDP growth and imports. The fourth section outlines a comprehensive policy agenda that must accompany ELR. Finally, the paper closes with summary and concluding remarks.

## **ELR EXPLAINED**

The history of economic thought is full of ELR ideas and policy proposals going all the way back to William Petty. However, the contemporary ELR literature has been primarily developed within the Post-Keynesian framework by Hyman Minsky, L. Randall Wray, William Mitchell, Edward Nell, and Mathew Forstater, to mention a few. Minsky's contribution to the revival of the ELR literature came in the 1960s in the context of the war against poverty in the United States. "The basic approach is straight forward—accept the poor as they are and tailor make jobs to fit their capabilities. After this is done, programs to improve the capabilities of low income workers are in order" (Minsky 1966). In other words, Minsky's model of "jobs first, training later" was the basic philosophy behind his full employment proposal. He rejected the neoclassical assumption of labor homogeneity and labor fluidity, and aimed at designing a policy that recognizes labor heterogeneity (skilled vs. unskilled) and makes do with the available labor force. "The emphasis upon job training, labor relocation, and other similar programs is intended to make labor more homogeneous. However, there are limits to the capacity of such programs to transform particular types of labor which are in excess supply into types that are in excess demand" (Minsky 1965). Along the same lines, Minsky also suggests that we might have to figure out ways to divide complex jobs into simpler jobs that the available labor surplus is capable of doing.

Work should be made available to all who want work at the national minimum wage. This would be a wage support law, analogous to the price supports for agricultural products. It would replace the minimum wage law; for, if work is available to all at the minimum wage, no labor will be available to private employers at a wage lower than this minimum. That is, the problem of coverage of occupations would disappear. To qualify for employment at these terms, all that would be necessary would be to register at the local public employment office. (Minsky 1965)

According to Minsky, ELR can achieve the above stated goals by creating:

an infinitely elastic demand for labor at a floor or minimum wage that does not depend upon long- and short-run profit expectations of business. Since only government can divorce the offering of employment from the profitability of hiring workers, the infinitely elastic demand for labor must be created by government. (Minsky 1986)

In the C-FEPS/CofFEE<sup>1</sup> version of ELR, the government *guarantees* a real job opportunity for anyone ready, willing, and able to work at a fixed, socially-established basic wage (plus benefits), thus exogenously setting the price of labor. With ELR, the government will provide a price anchor and establish greater price stability. During a recession, the size of the ELR pool increases to absorb workers displaced from the private sector, and when the economy booms it automatically shrinks when ELR workers find employment in the private sector, hence it operates as a buffer stock employment program. The ELR wage is fixed, while the quantity of labor in the buffer stock fluctuates. Private sector employers can obtain labor at a mark-up over the ELR fixed wage; hence the price-stabilization feature of the program. Furthermore, ELR reduces the depreciation of skills caused by unemployment and it contains a training component to prepare participants for private sector employment. ELR also gives more opportunities and freedom of choice for both workers and employers. Participation in the program is voluntary, so nobody will be forced to participate in ELR jobs. In addition, ELR does not displace private sector jobs since it offers jobs which are undersupplied or not supplied at all by the private sector. ELR jobs are socially useful, so it is not a “make work” program; such jobs include companions to the elderly, public school classroom assistants, safety monitors, low-income housing restoration engineers, environmental safety monitors, daycare assistants for ELR workers, community and cultural historians, and ELR artists or musicians (Wray 1998).

Building on Abba Lerner’s functional finance theory, ELR advocates argue that the government always has the financial capacity to pay for the program. Unemployment only develops “because government spending is insufficient relative to private savings” (Mitchell 2001). The size of the deficit necessary to maintain full employment is irrelevant; so is the national debt for the simple reason that the logic of government finances is totally different from that of households or firms. ELR proponents show that tax payments *do not* and *can not* finance government spending; for at the aggregate level, only the government can be the “net” supplier

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<sup>1</sup> C-FEPS: Center for Full Employment and Price Stability; CofFEE: Centre for Full Employment and Equity.

of fiat money. As a result, the starting point is government expenditure. Once government spends (creates or supplies) fiat money to purchase goods and services, it provides the private sector with the necessary amount of money to meet tax liabilities, save, and maintain transaction balances. The government can safely run a deficit up to the point where it has provided the quantity of non-interest-earning fiat money and interest-earning bonds desired by the public (Wray 1998; Mitchell 2001).

ELR critics often claim that the program would increase labor bargaining power since it eliminates the threat of unemployment, thus putting more pressure on the wage-inflation spiral. In response, ELR supporters argue that a *skilled* pool of *employable* ELR workers presents a greater “threat” to private sector employees than the traditional reserve army of the unemployed. Thus, one should not expect runaway inflation to develop under the ELR program (Wray 1998). Furthermore, the additional amount of government spending can hardly be inflationary given the low cost of running the program.

Estimates for the United States, United Kingdom, and Australia have shown that the cost of financing ELR ranges between less than 1% of GDP for the United States to about 3.5% of GDP in Australia (Mitchell and Watts 1997; Gordon 1997; Kitson, Michie, and Sutherland 1997; Majewski 2004; Fullwiler 2003, 2005). However, these estimates overstate the real cost of financing the program because they ignore the multiplier effects generated by the new income earned by ELR workers. ELR proponents also argue that the program will pay for itself through the reduction in other social spending associated with unemployment (unemployment benefits, food stamps, crime, police and courts, etc.). This paper will establish that such claims are also true for a small developing country like Tunisia, and that developing countries not only *can afford* a fully employed economy, but also can grow at a faster rate than under the current development schemes.

## **THE TUNISIAN ECONOMY**

This year Tunisia celebrates fifty years since the country earned independence in 1956 after more than seven decades under French rule. Naturally the postcolonial era began by an aggressive decolonization (or *Tunisification*) drive to rid the country of French control over its resources. Although Tunisia soon realized that despite its territorial independence, the country lacked the

infrastructure and the resources to be truly independent of France. Import Substitution Industrialization (ISI) was the fashion of the day in the 1960s and Tunisia was no exception. An ambitious socialist program led by Ahmed Ben Salah (Minister of Economic Planning and Finance, 1961–69) was set in motion and worked relatively well for nearly a decade. Had it not been for three years of consecutive droughts and bourgeois resistance to agricultural cooperatives, Tunisia could have continued its socialist program into the 1970s. The demise of the socialist experiment marked a complete reversal of policy agenda toward export-led growth and openness to external trade (and indebtedness). The opening up of the economy revealed the country's vulnerability to external shocks and its inability to conduct domestic economic policy without continuous outside pressures. Unexpected events, such as French trade barriers to Tunisian textiles, Italian trade barriers to Tunisian olive oil, Libyan deportation of Tunisian workers, and Saudi Arabia's depressing of oil prices, sent Tunisia into deep economic and political crisis in the early 1980s. International Financial Institutions (IFI) came to the rescue with what might be viewed as the economic blueprint that shaped Tunisia's performance since the mid-1980s.

The current economic situation traces its origins back to the political and economic crisis of the 1980s, which led to a change in political leadership in Carthage, as well as an economic policy shift toward radical, albeit gradual, economic liberalization under the Structural Adjustment Program (SAP). Despite very satisfactory results by IFI-mandated SAP-standards, Tunisia's unemployment record remained alarmingly high. It was in this context of mounting socioeconomic pressures stemming from SAP policies that the so-called "Solidarity Network" (National Solidarity Fund, Tunisian Solidarity Bank, and National Employment Fund) was introduced by the government to help cope with unemployment and socioeconomic exclusion in a manner deemed consistent with the overarching SAP agenda. However, despite its emphasis on employment creation, the "Solidarity Network" was not designed as an ELR program, but merely as a set of programs focusing on job training, self-employment, and microcredits. Such programs have certainly increased *employability* but have not increased the aggregate number of jobs in Tunisia.

Today, Tunisia is considered a lower middle-income developing country (\$2,500 per capita GDP), and is moderately indebted (total debt stock is around \$16 billion, 53.3% of GDP,



with 13.1% debt service ratio).<sup>2</sup> In the last 10 years, Tunisia’s real GDP growth has averaged 5% and inflation has gravitated around 3%. The poverty rate has been brought down from 22% in 1975 to less than 4% by 2001, population growth rate has declined to less than 1% in 2005 (compared to 3% in 1966), and life expectancy has reached 74 years in 2004. The total population stands at 10 million people, with a 3.4 million-person labor force. However, despite an excellent performance in improving socioeconomic and demographic indicators, Tunisia’s unemployment rate remains alarmingly high at 14%.

**Graph 1: Official Unemployment Rate**



Source: INS (2006)

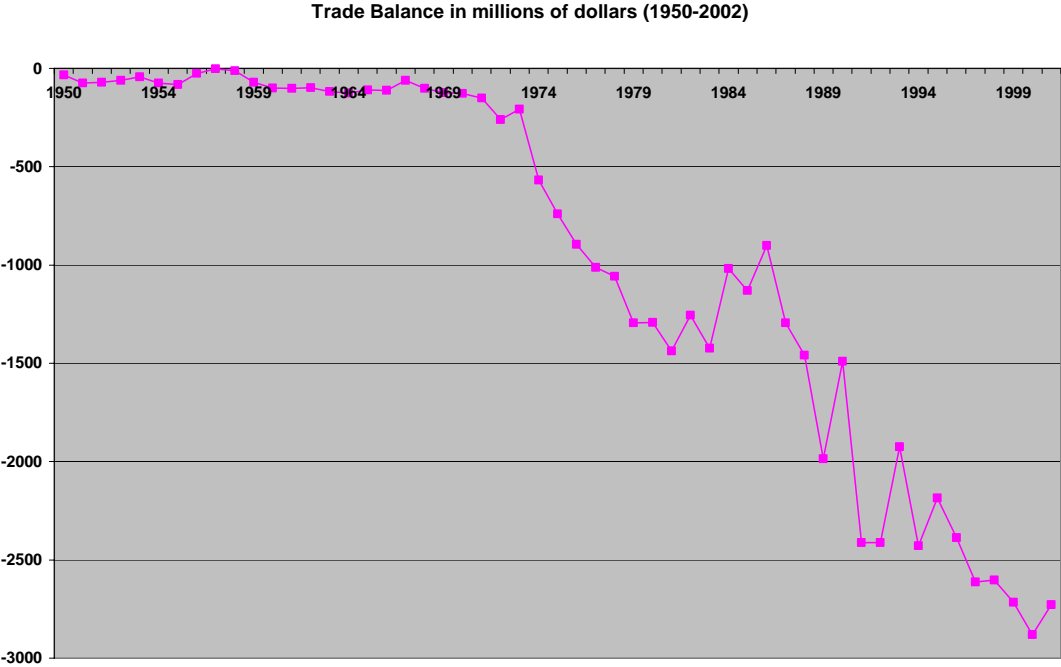
High unemployment is not only an economic problem, but it is also increasingly becoming a social and political issue that has the potential to destabilize Tunisia if not dealt with promptly and strategically. The fight against unemployment in Tunisia has become the number one priority for the government in the last five years. Given the massive investment in human

<sup>2</sup> 2003 statistics from the Central Bank of Tunisia (BCT).

capital that Tunisia has committed itself to since independence, unemployment is considered such a waste of national resources. Tunisia has spent 25% of its annual government budget on public education. Today’s unemployment situation reveals that the composition of the unemployment pool has become qualitatively different from what has been the custom in the past. An increasingly sophisticated labor force calls for a well-designed ELR program that takes into account the skill mix and career aspiration of the labor force.

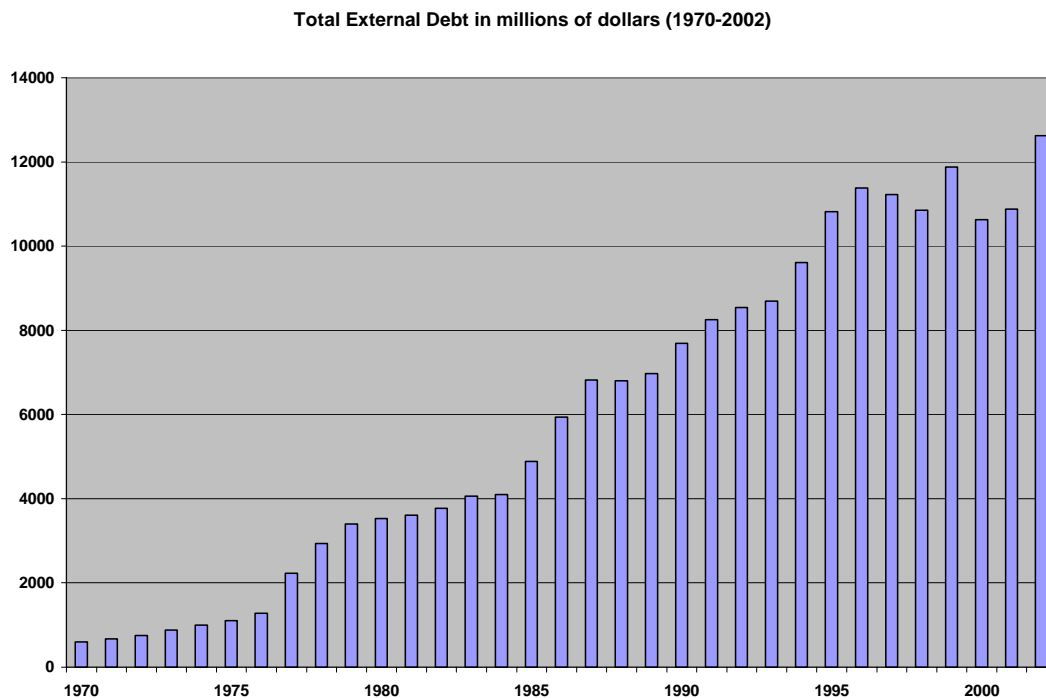
In 2006, for the first time in Tunisia’s history, two thirds of the first-time job seekers have a university degree. This trend is likely to continue well into the foreseeable future as the number of college students continues to grow exponentially. A closer look at the Tunisian labor market reveals that more than 50% of the unemployed have been actively seeking work for more than 12 months. Unfortunately, despite the urgency of the unemployment situation, the active labor market policy (ALMP) budget has been around 1.5% of GDP with a meager 0.15% of GDP devoted to direct job creation in public works.

**Graph 2: Trade Balance 1950–2002 (millions of US\$)**



Source: UNCTAD (2003)

**Graph 3: Total External Debt 1970–2002 (millions of US\$)**



Source: UNCTAD (2003)

Tunisia’s development experience mirrors that of many other developing countries. Neither export-led nor ISI-led growth has helped establish full employment, and ironically, nor have they reduced imports either. Worse still, such policies have led to more external indebtedness, financial and economic dependence on IFI, and continuous sacrifice of national resources. The more recent addiction to foreign direct investment (FDI) has also led for hopes of an FDI-led economic growth. But in reality, growth has continued without any significant impact on employment. In the next section, we will establish the financial feasibility of full employment under an ELR program, thus demonstrating that an ELR-led economic development strategy could achieve the same development goals as ISI, export-led, and FDI-led growth, with the added benefit of full employment, price stability, and financial sovereignty.

A significant issue that ELR must tackle is the mismatch of skills between the ELR job openings and the profile of the unemployed. A process of institutional adjustment must take place here as well. Only 0.4% of the employees in public works have postsecondary education. This is primarily due to the very nature of the traditional public works projects being mostly

geared towards construction projects that require a modest level of education and skills. ELR in Tunisia must therefore introduce new kinds of jobs in the public sector that go beyond just basic infrastructure.<sup>3</sup> Such jobs could include public school tutors, public school and/or community musicians/artists, community health care consultants, recycling consultants, community historians, community ethnographers, community statisticians, community computer assistants, community web developers and webmasters,<sup>4</sup> and national translation agents.<sup>5</sup>

This new community based employment dynamic is to be implemented in a decentralized way, but it is to be funded by the national government. One-point-five percent of GDP spending on ALMP is an extremely low level of spending for a country that has consistently wasted the human capital of at least 15% of its most vibrant working-age population—the same population that the government has spent so much to educate and keep healthy in the last five decades.<sup>6</sup> Gradually increasing the budget line for ALMP (under an ELR program) to 3–5% of GDP is something that the Tunisian economy can easily handle (see next section).

## **ELR COST ESTIMATION FOR TUNISIA**

It is important in the case of Tunisia (or any other developing country) to avoid using shock therapy in implementing ELR. A gradualist approach is the key to the overall success of the program. The most important reason for using a gradualist strategy is the process of institutional adjustment (Kaboub 2006, 2007). We must allow economic agents to adjust their behavior and their expectations to new economic conditions, and, more specifically, to the presence of the ELR administration as a major institutional actor in the economy. Inflation expectations (and therefore actual inflation) will be easier to manage when ELR is introduced gradually since the

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<sup>3</sup> We must add that traditional public works projects must also increase in size and should give more attention to sanitation, environmental clean up, recycling, reforestation, and antidesertification projects. The potential for job creation in those areas is simply capable of absorbing the entire pool of the “hardcore unemployed.”

<sup>4</sup> Websites devoted to information dissipation, conservation of local/regional history, culture, and traditions. Such projects would involve higher education graduates with degrees/specializations in history, anthropology, sociology, computer science, geology, psychology, ethnography, social work, folklore studies, literature, religious studies, art, art history, photography, journalism, communications, statistics, music, dance, graphic design, and architecture.

<sup>5</sup> Translate major foreign language books, poems, novels, and plays into Arabic language; and translate major Arabic literature to French, English, Italian, Spanish, and German to be published online.

<sup>6</sup> The consistently high unemployment rate among the young, educated, first-time job seeker is also contributing to the tremendous brain drain from which Tunisia continues to suffer.

financial cost will be phased in slowly and the benefits of ELR will be assessed progressively by economic agents, which will help reshape expectations about the program. Consequently, we propose to introduce ELR in three phases over a period of six years. Jobs in the ELR program are to be designed in the most flexible way possible. ELR workers will have the option of working full time or part time, and may opt for training and educational programs to improve their skill level. However, the estimation procedure here will assume that all ELR employees are working full time and therefore will tend to overestimate the cost of the program.

### **Phase One: Heads-of-Households ELR program (HH-ELR)**

This is a relatively small population group; less than 2% of the active labor force participants are unemployed heads of households (approximately 20,000 people). Introducing ELR at this “small scale” level allows the government to master the logistical aspects of the program at a quasi-experimental level before the expansion of the program to benefit a larger group of job seekers. It also serves the immediate goal of securing a basic income level for all households in Tunisia, which would further reduce the poverty rate and socioeconomic exclusion. Even from a sound finance perspective, this phase will not disturb inflation expectations because of the low financial cost of the program and the positive demand-side impact that it will have domestically. HH-ELR could be implemented for two years before moving the program to Phase Two. HH-ELR represents a crucial transition phase between the Solidarity Network and a true full employment regime.

### **Phase Two: 12+ELR**

This phase guarantees employment for persons unemployed for more than 12 months (12+ELR). This group represents about 50% of the unemployment pool in Tunisia, which is approximately 216,450 people. This figure includes the 20,000 people from HH-ELR, so the estimates for Phase Two would be inflated, which could be justifiable since we expect the program to draw many people away from the informal sector and into the labor force given the improved working conditions and social benefits offered by HH-ELR. After two years of logistical implementation of HH-ELR, the ELR administration should be ready to make a smooth transition into 12+ELR. Under this program, several other government programs formerly designed to deal with unemployment will be relieved both financially and logistically, which should make 12+ELR an

even less significant “financial burden,” and therefore should help reduce inflation expectations stemming from the private sector. The next section will establish that a sovereign government that issues its own currency and imposes tax liabilities denominated in its currency would not, in fact, have any financial burden to finance full employment.

Phase Two may seem to create an incentive for job seekers to remain unemployed for more than 12 months in order to benefit from ELR. This cannot be true since most job seekers are already spending more than a year looking for work in a non-ELR system. However, we should expect an increase in labor force participation from those who are initially active in the informal sector, as well as those who did not look for employment at all in the past but are now drawn to the ELR sector for the benefits and flexibility it provides to them. The experience of Argentina has revealed that women with no prior work experience in particular have been drawn to the ELR sector because of the benefits provided by ELR that are not available in the private sector, such as proximity of work place to home/children, flexible hours, educational opportunities, availability of childcare, etc.

### **Phase Three: ELR**

This is an ELR program to employ anyone who is ready willing and able to work, which are approximately 432,900 people. This figure includes the 216,450 people from HH-ELR and 12+ELR, so the total estimates would be inflated as well.<sup>7</sup> Once again, this is justifiable since we expect ELR to draw many people away from informal markets and into the labor force given the improved working conditions and social benefits offered by the program. This is the final stage of implementation, which will also be a crucial phase for the ELR administration and will test its ability to manage the program both logistically at the local implementation level and macroeconomically in terms of policy coordination between fiscal and monetary policy.

We estimate the financial cost of each one of the three phases (HH-ELR, 12+ELR, and ELR). The estimation is based on the 2004 unemployment rate of 13.9% (432,900 unemployed persons), and assumes that the number of people unable to find work in the non-ELR sector will remain constant throughout the six years of implementation. This assumption will exaggerate the

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<sup>7</sup> Here we are making the implicit assumption that the ELR program and its multiplier effect do not create new private sector jobs, and that private sector jobs simply grow along with the number of new entrants into the labor force. In reality, however, we do expect ELR to have a positive multiplier effect on private sector growth that would absorb new entrants into the labor force, and that the private sector will, in fact, hire away some of the ELR workers.

true cost of ELR, but we are willing to use it for the sake of the argument. For each one of the three phases listed above, we calculate the annual ELR wage bill, the annual value added tax (VAT) collected by the government from ELR workers through their induced consumption, the net ELR wage bill, the multiplier effect of the ELR wage bill, its impact on GDP growth, and its impact on annual imports. We assume that the administrative cost of ELR will be absorbed by the current budget devoted to the Solidarity Network, so our estimates will be more or less close to the real cost of implementation of ELR. All calculations are based on official INS statistics unless otherwise indicated. Using national income accounting data, we utilize the following figure for our calculations:

Marginal Propensity to Consume (MPC) = 0.785

Marginal Propensity to Import (MPM) = 0.478

Tax rate = 0.1

Multiplier (k) = 1.295

Annual GDP growth rate = 5%

Initial GDP level = TND 35 billion

Assuming an ELR wage structure such as:

W<sub>1</sub>: skilled workers (post-secondary education, technical training, or an equivalent amount of prior work experience) earn 3\*SMIG-40 = TND 569.4 per month;

W<sub>2</sub>: semi-skilled workers (secondary education, some work experience, perhaps need some additional training) earn 2\*SMIG-40 = TND 379.6 per month; and

W<sub>3</sub>: unskilled workers (no education, primary school education, no training) earn SMIG-40 = TND 189.8 per month.

This categorization allows us to distinguish two income categories from the ELR pool: Income Category 1 earns W<sub>1</sub> (TND 400-600 per month), and Income Category 2 earns W<sub>2</sub> and W<sub>3</sub> (less than TND 400 per month). Following Kalecki's proposition that "workers spend what they get," we will assume that ELR workers will spend all their income<sup>8</sup> and therefore will not

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<sup>8</sup> This is a reasonable assumption given that the wage structure is relatively low, especially for those earning SMIG-40.

save. We will now use the Household Survey (INS 2000) to group the consumption categories according to the corresponding Value Added Tax (VAT) rate.

Table 1 shows that, for instance, Income Category 1 spends 54.5% of its income on consumption goods with a 0% VAT, whereas Income Category 2 spends 58.6% on those goods. Consequently, we can determine the annual VAT paid by each ELR beneficiary in each income category. This will allow us later to calculate the net annual ELR wage bill. Thus, ELR workers who earn  $W_1$  would pay TND 71.09 per month in VAT, and those who earn  $W_2$  would pay TND 40.12, whereas those who earn  $W_3$  would only pay TND 20.06 per month in VAT. Of course, our analysis here does not suggest that VAT collected by the government would finance the ELR program, but rather we simply want to get a close estimate of the financial impact of ELR in Tunisia given that in developing countries like Tunisia, VAT<sup>9</sup> plays a crucial role in the fiscal system, as opposed to industrialized countries where income tax plays a much more prominent role.

**Table 1: Annual Personal Consumption Expenditure by VAT and Income Level**

| Value Added Tax    | Income Category 1<br>(TND 400-600/month) | Income Category 2<br>(less than TND 400/month) |
|--------------------|--|--|
| VAT-0 = 0%         | 54.5%                                    | 58.6%  |
| VAT-1 = 6%         | 13.4%                                    | 11.3%  |
| VAT-2 = 10%        | 11.5%                                    | 13.4%  |
| VAT-3 = 29%        | 16.3%                                    | 13.2%  |
| Tobacco VAT = 135% | 4.3%                                     | 3.5%   |
| Total              | 100%                                     | 100%   |

**Source:** Compiled by the author from INS (2000) and Code Fiscal (2005)

The above assumptions about ELR wages raise the question of wage adjustment. We will assume that the ELR wages are constant for the purposes of this cost estimation exercise, but in

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<sup>9</sup> See Baccouche (1994).



reality, ELR wages will be adjusted in accordance with the normal minimum wage sociopolitical bargaining process. Thus, we expect the ELR wage structure to rise over time. The three-tier ELR wage structure is not part of the traditional ELR literature. It is introduced here to fit the particular sociocultural expectations of the Tunisian labor market. While traditionally ELR is designed as a buffer stock employment policy acting as a safety net to employ unskilled job seekers, the dynamics and composition of the jobless pool in Tunisia indicate that a one-wage system is doomed to deter skilled and semiskilled individuals from participating in the program due to low pay and social stigma.

In a single-tier ELR wage system, the ELR wage would set the value of the currency since the government determines the amount of labor time that must be delivered to earn a unit of currency (Wray 1998). But in a three-tier ELR wage system, the value of the currency will be determined by the relative composition of the ELR pool. Thus, we can think of the value of the currency as being determined by a weighted average of the three ELR wages. So, if most ELR workers are earning  $W_3$ , then the value of the currency will *primarily* be determined by  $W_3$ . Furthermore, the implication for private sector employers would be the same as in a one-tier ELR wage system. Firms aiming to hire skilled workers will have to offer at least  $W_1$  in order to be able to attract skilled workers away from the ELR pool. Similarly, firms looking to hire unskilled workers will have to offer  $W_3$  to attract unskilled workers away from the ELR pool, since skilled and semi-skilled ELR workers will not be competing for those jobs. Hence the three-tier ELR wage structure would still have the same theoretical implications as the traditional ELR wage system but with the added sociopolitical feasibility required in the case of the Tunisian labor market dynamics.

From a logistical standpoint, an ELR program in Tunisia should avoid having skilled, semiskilled, and unskilled employees working side by side and doing more or less the same tasks while earning three different wages. In fact, ELR projects must be designed to encourage skill transfer, apprenticeship, and mentoring among ELR workers. ELR projects do not have to abide by traditional workplace labor relations, nor does it have to impose top-down apprenticeship relations. Most large and medium-size ELR projects require the collaboration of workers of various skill levels. Even small-scale projects, such as documenting oral traditions and promoting traditional culture, may involve the collaboration of a college graduate in history or sociology (skilled ELR worker) with an amateur photographer (semi-skilled ELR worker) and an

apprentice photographer (unskilled ELR worker). Each one of the three ELR workers in this case has the opportunity to learn from his/her colleague in a collaborative manner.

ELR projects in Tunisia do not have to be micromanaged by the government. It is important to highlight that only the funding for the program must be managed by the government, but the micro-level implementation must be delegated to nonprofit organizations, nongovernment organizations, and, when necessary, to private firms. This will be consistent with Tunisia's efforts to decentralize economic decisions and to give the nongovernment sector a greater role in the economic development process. This may require an initial upgrading of the nongovernment sector's administrative structure, which should be doable through the transformation of the Solidarity Network into an ELR network. This raises the question of the administrative cost of the program. A rough estimate would be 1% to 2% of GDP, most of which would be absorbed by the Solidarity Network and other administrative bodies dealing with employment promotion in Tunisia.

Now that we have dealt with the logistical aspects of the program, we can simulate the implementation of the ELR program over a six-year period beginning with HH-ELR (Years 1 & 2), then 12+ELR (Years 3, 4, and 5), and finally a full-fledged ELR program (Year 6). In Year 1, HH-ELR would begin to guarantee employment for 20,000 heads of households at a monthly wage ( $W_3$ ) of TND 569.4 ( $3 \times \text{SMIG}-40$ ). This means that the annual HH-ELR wage bill would be TND 136.65 million, or 0.38% of GDP as shown in [1]:

$$\text{Annual HH-ELR Wage Bill} = 20,000 \times 12 \times 569.4 = \text{TND } 136.656 \text{ million} \quad [1]$$

The resulting consumption would lead to more than TND 17 million in VAT payments to the government, shown in [2] as the number of HH-ELR beneficiaries times the individual monthly VAT on a TND 569.4 monthly income (TND 71.06) times 12 months:

$$\text{VAT payments} = 20,000 \times 71.09 \times 12 = \text{TND } 17.06 \text{ million} \quad [2]$$

These payments to the government would yield a net annual ELR wage bill of TND 119.59 million, or 0.34% of GDP, as shown in [3]:

$$\text{Net Annual HH-ELR Wage Bill} = [1] - [2] = \text{TND } 119.59 \text{ million} \quad [3]$$

Consequently, HH-ELR will have a net positive multiplier effect of TND 154.97 million (0.44% of GDP), as shown in [4]:

$$\text{HH-ELR Multiplier Effect} = 1.295 * 119.59 \text{ million} = \text{TND } 154.97 \text{ million} \quad [4]$$

In addition, HH-ELR would induce an increase in annual imports by TND 74.22 million (0.21% of GDP), as shown in [5]:

$$\text{Increased Imports} = 0.44\% * 16.812 \text{ billion} = \text{TND } 74.22 \text{ million} \quad [5]$$

Similarly, the calculations made in equations [1] through [5] are used to make calculations for Years 2, 3, 4, 5, and 6. In Year 2, the net annual HH-ELR wage bill being the same (TND 119.59 million), but now representing only 0.32% of GDP, as opposed to 0.34% in Year 1. Similarly, the multiplier effect in Year 2 (TND 154.97 million) represents 0.41% of GDP and leads to an increase in imports of 0.2% of GDP.

In Year 3, 12+ELR would be introduced and would employ anyone who has been unemployed for more than 12 months. This represents 50% of the unemployed in Tunisia (216,450 people). The annual 12+ELR wage bill would be TND 767.1 million (1.89% of GDP). The induced consumption from 12+ELR workers earning  $W_1$  (20,350 workers), those earning  $W_2$  (79,650 workers), and those earning  $W_3$  (116,450 workers) would generate a total annual VAT of TND 83.75 million (0.2% of GDP), thus giving us a net 12+ELR wage bill of TND 683.34 million (1.69% of GDP). The resulting multiplier effect would reach TND 957.03 million (2.36% of GDP), and would induce a TND 398.44 million increase in imports (0.98% of GDP). Years 4 and 5 would have the same net annual wage bill of TND 683.34 million, but representing 1.57% of GDP and 1.47% of GDP respectively thanks to the additional GDP growth brought by the multiplier effect of 2.2% and 2.05% respectively in Years 4 and 5. Similarly, imports would also grow by 0.91% and 0.85% of GDP in Years 4 and 5 respectively.

Finally, in Year 6, a full-fledged ELR program would be implemented to benefit 432,900 people, 40,700 of whom would earn  $W_1$ , 159,300 would earn  $W_2$ , and 232,900 would earn  $W_3$ . The resulting annual ELR wage bill would be TND 1.53 billion (3.08% of GDP), with induced VAT payments of TND 167.5 million (0.33% of GDP), therefore giving us a net annual ELR wage bill of TND 1.36 billion (2.74% of GDP). Consequently, the multiplier effect would

generate an increase in GDP by TND 1.82 billion (3.67% of GDP), with a TND 617.98 million increase in imports (1.24% of GDP).

**Table 2: ELR Impact Summary Table**

|                        | Year 1                           | Year 2                           | Year 3                           | Year 4                           | Year 5                           | Year 6                           |
|------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Number of participants | 20,000                           | 20,000                           | 216,450                          | 216,450                          | 216,450                          | 432,900                          |
| Net Annual Wage Bill   | 119.59 million<br>(0.34% of GDP) | 119.59 million<br>(0.32% of GDP) | 683.34 million<br>(1.69% of GDP) | 683.34 million<br>(1.57% of GDP) | 683.34 million<br>(1.47% of GDP) | 1.36 billion<br>(2.74% of GDP)   |
| Multiplier Effect      | 154.97 million<br>(0.44% of GDP) | 154.97 million<br>(0.41% of GDP) | 957.03 million<br>(2.36% of GDP) | 957.03 million<br>(2.2% of GDP)  | 957.03 million<br>(2.05% of GDP) | 1.82 billion<br>(3.67% of GDP)   |
| Increase in Imports    | 74.22 million<br>(0.21% of GDP)  | 74.22 million<br>(0.2% of GDP)   | 398.44 million<br>(0.98% of GDP) | 398.44 million<br>(0.91% of GDP) | 398.44 million<br>(0.85% of GDP) | 617.98 million<br>(1.24% of GDP) |

Source: Author's calculations

The results shown in Table 2 may only change if the number of participants in the program fluctuates. If, for instance, some of the ELR workers included in the calculations above are hired away by the private sector, only the ELR wage bill would change, but the multiplier effect and its impact on imports would remain the same. Argentina's experience, however, has shown that ELR could be a magnet for nontraditional job seekers, such as women, who have never been in the labor force or even in informal labor markets. It would be beneficial to our analysis to estimate what would be the impact of an increase in female labor force participation from its current level of 24.2% to 50%. If we assume that ELR would induce an increase in female labor force participation to 50%, this means that there would be an additional 700,000 job seekers in the ELR pool. The total number of job seekers would be brought to 1,132,900 people. Nothing would change in the mechanics of the program; only at the logistical level, greater

efforts will have to be made to accommodate a larger ELR pool of workers. The results are summarized in Table 3.

**Table 3: ELR Impact with 50% Female Labor Force Participation Rate**

|                        | Year 1                           | Year 2                           | Year 3                         | Year 4                         | Year 5                         | Year 6                         |
|------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Number of participants | 22,658                           | 22,658                           | 566,450                        | 566,450                        | 566,450                        | 1,132,900                      |
| Net Annual Wage Bill   | 135.48 million<br>(0.38% of GDP) | 135.48 million<br>(0.36% of GDP) | 1.78 billion<br>(4.55% of GDP) | 1.78 billion<br>(4.05% of GDP) | 1.78 billion<br>(3.43% of GDP) | 3.57 billion<br>(6.72% of GDP) |
| Multiplier Effect      | 175.56 million<br>(0.5% of GDP)  | 175.56 million<br>(0.47% of GDP) | 2.52 billion<br>(6.42% of GDP) | 2.52 billion<br>(5.71% of GDP) | 2.52 billion<br>(4.84% of GDP) | 4.72 billion<br>(8.89% of GDP) |
| Increase in Imports    | 84.08 million<br>(0.23% of GDP)  | 84.08 million<br>(0.22% of GDP)  | 1.08 billion<br>(2.75% of GDP) | 1.08 billion<br>(2.45% of GDP) | 1.08 billion<br>(2.07% of GDP) | 1.49 billion<br>(2.81% of GDP) |

Source: Author's calculations

Despite the fact that we have purposefully overestimated<sup>10</sup> the cost of financing the program by assuming that it would attract more people from the informal labor market, our estimates still show that full employment is not only affordable (even from a sound finance perspective), but it does also generate significant additional GDP growth, exceeding 3% by Year 6 (See Table 2). Thus, we conclude that the obstacles to full employment cannot be financial. The issue here is not one of government deficits and national debt, but rather an issue of “deficit of ideas” and obedience to the conventional wisdom as dictated by the Washington Consensus. Having established the financial feasibility of full employment in Tunisia, we shall now turn to

<sup>10</sup> Our estimates here are purposely overgenerous to the critics of ELR in order to allay fears that the program would be inflationary. ELR cannot be inflationary because it is a floor buffer stock program.

the broader policy agenda that must accompany ELR in order to ensure long-term improvement of Tunisia's economic conditions in the context of an open economy system.

## **A COMPREHENSIVE POLICY AGENDA FOR FULL EMPLOYMENT**

Implementing full employment in a small open economy like Tunisia can be a challenging task, but as discussed above, it is certainly achievable when a sovereign country like Tunisia is willing to take its fate in its own hands by reclaiming sovereignty over its own domestic monetary and fiscal policies under a floating exchange rate regime. In this section, we want to tie together the theoretical ELR framework and the modern money approach with the Tunisian institutional characteristics and the six-year financial plan to implement ELR in Tunisia as outlined in the previous section. In doing so, we refute the idea that a small open economy cannot implement full employment on its own and that it must abide by the rules of international markets.

The often-cited objection to full employment in developing countries is the issue of a trade deficit caused by a rising domestic income level. It is argued that developing countries cannot afford to run trade deficits because such deficits must be financed through borrowing in "hard currencies" if the country is incapable of increasing its export earnings or attracting foreign investment (FDI and capital inflows). The servicing of external debt becomes an economic priority that supersedes the objectives of full employment, economic development, and poverty alleviation (Kaboub and Todorova 2005b). Small developing countries are essentially locked into a high-debt-underdevelopment vicious circle that worsens their conditions over time. The mainstream argument claims that there is no international demand for "soft currencies" like the TND or TND-denominated assets such as TND-denominated bonds issued by the Tunisian government. So, in order to finance the country's imports, Tunisia must either increase its exports to accumulate "hard currency" reserves, attract foreign investment, or borrow hard currencies from abroad. Consequently, it is suggested that such goals require an austerity policy mix of high domestic interest rates (to prevent capital outflows), depressed aggregate demand (to reduce imports), and low wages (to depress consumption and attract FDI); all of which are, in fact, responsible for keeping the economy in a perpetual state of depression without necessarily eliminating the trade deficit. Furthermore, the orthodox view argues that the central bank must maintain/protect the value of the TND relative to a basket of hard currencies through tight

monetary policy in order to prevent capital flight, otherwise Tunisia would not be able to finance its net imports and service its external debt. A currency devaluation (not to mention debt repudiation) is viewed as a dangerous event that must be avoided at all costs.

Contrary to the conventional wisdom, the State Theory of Money presented in Chapter 2 provides us with a fresh perspective on what sovereign governments can do to pursue full employment. Let us now outline the specifics of what Tunisia must do to implement full employment as a long-term development strategy. The TND should become completely convertible in international exchange markets at a flexible rate. The BCT should give up its exchange rate defense strategy and let the value of the TND be determined in international exchange markets. In the case of a rising trade deficit, the relative value of the TND will decline (TND depreciation). According to Wray's analysis (2006), the real meaning of a trade deficit is that the rest of the world (ROW) wishes to net save TND-denominated assets, and that "the real national cost of enjoying imports consists of the exports that must be delivered" (Wray 2006). He adds that:

A trade deficit thus means that the country enjoys real net benefits because the benefits (imports) exceed the costs (exports). As a trade deficit increases, the per unit real cost of imports is declining in the sense that relatively fewer exports have been demanded by the ROW per unit of import. (Wray 2006, 15)

It is worthwhile to highlight the importance of imports of intermediate goods and capital goods for the Tunisian economy. Net imports are vital for the Tunisian economy, so any policy that discourages those imports for "financial" reasons can only have a negative effect on economic activity. Of course, the Tunisian government may wish to discourage certain imports, such as luxury goods, but under a floating exchange rate regime with convertible currency, individuals who can afford such goods are free to pursue such consumption through international currency exchange markets without putting any burden on the BCT. The same would apply to private firms wishing to import intermediate goods—they can issue debt denominated in any foreign currency with no effect on the government's ability to run a full employment policy. However, the impact of a TND devaluation will require government intervention to protect vulnerable groups and to secure adequate supplies of basic necessities.

It is expected that a TND devaluation would increase the price of imported goods relative to domestic goods. When substitutes are readily available, this could have a stimulative effect on

domestically produced products. But when no domestic substitutes are available (or if domestic substitutes require imported intermediate goods), an upward pressure on prices will begin to occur. Soft wheat, for instance, is a significant component of Tunisian imports and has a very low price elasticity of demand. In case of a TND devaluation, soft wheat prices would go up, thus leading to higher bread prices. This would require additional bread subsidies from the government to prevent bread prices from rising. Other key commodities would also require price stabilization efforts from the government, thus leading to a larger government deficit. A redistribution policy must therefore accompany the ELR program to offset any negative effects of TND depreciation on vulnerable groups. In fact, as discussed in Chapter 4, a desirable strategy for ELR is to seek to employ people in activities that help reduce dependency on imports.

According to Wray's analysis (2006), a small open economy like Tunisia can be described by the following five characteristics:

1. A very low price elasticity of demand for imports.
2. A high income elasticity of demand for imports (chronic trade deficit).
3. A price-taker position in international markets.
4. A trade deficit that leads to currency depreciation, but the latter not being large enough to eliminate the former.
5. A currency depreciation that can put upward pressure on domestic prices.

As discussed in the previous section, the gradual implementation of HH-ELR, 12+ELR, and ELR over a six-year period would have a significant positive effect on economic growth and a moderate increase in the trade deficit. This would initially lead to an improvement in Tunisia's terms of trade, but as the TND begins to depreciate, the cost of imported goods will increase, which will require additional government deficit spending (TND-denominated deficit<sup>11</sup>) on items such as bread subsidies, for example. It is also expected that export commodities will see their TND-prices rise domestically even though their prices in the international markets remain constant. Consequently, the TND depreciation will lead to a net improvement in Tunisia's real terms of trade (i.e., fewer exports have been demanded by the ROW per unit of import) given that import and export commodity prices remain constant (determined in international markets).

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<sup>11</sup> Government deficit can also induce further TND depreciation.



A plausible scenario is that when some of the export commodities become more expensive domestically, they could be freed up for exports, which could reduce the trade deficit and slow down the TND depreciation.

The effect of TND depreciation on the domestic economy is a rise of the relative price of all commodities with significant import content. Wray (2006) suggests that this should not be called “inflation,” but rather a “relative price effect,” and he warns that the government should not attempt to fight this with an indexation policy which will make things worse by creating structural inflation. At the end of the day, the impact of ELR with TND devaluation would be higher economic growth and improved real terms of trade, accompanied by an increase in domestic prices and a redistribution policy. This seems like a reasonable bargain for a country that is operating way below full capacity utilization.

The next issue that must be tackled here is that of the trade deficit. When Tunisia runs a balance of payment deficit, it means that the ROW is holding TND-denominated assets that may eventually be redeemed against Tunisian output, in which case Tunisia actually has to increase its exports to the ROW. But in the absence of this response, TND-denominated debt could be serviced and retired by simply issuing Tunisia’s own fiat currency. Consequently, government deficit and national debt will increase, but this does not necessarily mean that it will be inflationary, nor does it mean that the TND-denominated debt will be a burden on future generations. Once again, a sovereign government that issues its own fiat currency cannot face a financial constraint. The only reason the Tunisian government issues TND-denominated assets is to give nongovernment agents (including the ROW) an opportunity to hold a safe interest-bearing alternative to cash balances. The government does not need to “borrow” its own fiat money to “finance” its spending, but rather it needs the public to demand its currency in order to give it value. The public, in turn, demands the TND currency in order to meet its tax liability<sup>12</sup> (and also in the case of Tunisia because the TND is a legal tender).

The role of the Central Bank of Tunisia (BCT) now becomes one of debt management rather than monetary control. The BCT will use TND-denominated assets to conduct its open market operations in order to keep its short-term interest rate (TMM) at the desired target. When government deficits (surpluses) lead to an increase (decrease) in excess reserves in the banking

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<sup>12</sup> See Wray (1998); Bell (2000, 2001); Forstater (1999, 2003); Kaboub (2005a, 2005b); and Kaboub & Forstater (2003).

system, the TMM will tend to fall (rise), in which case the BCT would sell (buy) TND-denominated assets. Note that the government has the capability to determine domestic interest rates at the desired target, in the same way that it has the power to set tax liability on the population. Interest rate targets and tax rates may be adjusted at the government's discretion in a way that is consistent with full employment and price stability. Therefore, we conclude that it is a myth to say that governments have no choice but to borrow in hard currencies and impose austerity measures on their economies.

If the Tunisian government adopts a flexible exchange rate regime and allows free convertibility of the TND in international exchange markets, then Tunisia can practically import anything it wants by simply offering to exchange TNDs for whatever other currency is required for that purchase. There will always be a demand for TNDs, albeit at a devalued exchange rate. At the domestic level, the government can purchase any commodity it wishes to, whether it's soft wheat or labor power, simply by using its sovereign seigniorage power and by following the fiscal and monetary guidelines discussed above. Subsequently, once ELR is implemented successfully, there will be a reversal in all the initial negative effects. FDI inflows<sup>13</sup> are expected to increase, taking advantage of the improved labor force skills and the more robust economic performance. Furthermore, output and exports are expected to rise due to improved labor force participation and capacity utilization. This will lead to an improvement in the trade balance, in addition to a reduction in the size of the ELR pool, which in turn reduces government spending on ELR projects. In a matter of ten years, Tunisia could be on its way to stable long-term growth with full employment and price stability.

Finally, to recapitulate what needs to be done in a comprehensive policy agenda for ELR in Tunisia, the following issues must be noted:

- Adequately training ELR administrators, supervisors, and technical staff.
- Creating a reserve shelf of ELR projects ordered by priority and potential benefits to the local community and the country.

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<sup>13</sup> But care must be taken that they do not create foreign denominated contingent liabilities as occurred in Argentina as foreign-owned firms borrow in foreign markets to finance their local activities.

- Taking the opportunity of ELR implementation to further improve decentralization<sup>14</sup> and grassroots participation<sup>15</sup> in public policy.
- Strategically planning for a positive ELR cultural perception (PR campaign).
- Gradually transforming the existing Solidarity Network into a full employment network that ensures minimal dislocation.
- Gradually increasing the ALMP budget with a significant increase in the role played by public works in direct job creations.
- Modernizing the concept of “public works” to incorporate the concept of “community service works” in order to match the skills of the unemployed.
- Using ELR public works to improve environmental conditions in Tunisia in order to ensure coevolutionary sustainability.
- Investing more in indigenous technologies (especially environmental technology).
- Modifying the labor code under ELR to create more “flexibility” in the labor market without sacrificing labor rights.
- Regaining financial sovereignty over the TND.
- Allowing complete and free convertibility of the TND in international exchange markets.
- Adopting a flexible exchange rate regime.
- Issuing only TND-denominated debt.
- Adopting a functional finance approach to public finance.
- Paying off foreign-denominated debt through export revenues.
- Negotiating partial payment of foreign-denominated debt in TND instead of hard currencies.
- Reforming the educational system to reintegrate dropouts back into the education/training system through GED programs and community college programs.
- Legislating new land reforms that favor small and medium-size farmers.
- Rethinking industrial policies to favor vertical and horizontal integration within Tunisia and with its trade partners.

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<sup>14</sup> See Almarzouki (2005), Bouichba (1992), and Ben Achour (2000) for a survey of the structure of Tunisian political and administrative organization.

<sup>15</sup> See Bhaduri (2005) and Chaabane (1997).

- Reducing dependency on EU markets and improving trade relations with regional and equally competitive markets in the MENA region, Africa, Latin America, and South East Asia.

## **CONCLUSION**

This paper has argued that ELR is supported by a robust theoretical model and is capable of eliminating unemployment and providing price stability in market economies. The case has been made that even a small developing country like Tunisia can afford an ELR program. A six-year plan to gradually introduce ELR has been outlined. First, HH-ELR would be implemented for two years and would benefit 20,000 people. Second, 12+ELR would be implemented for three years and would benefit 216,450 people. And finally, a full-fledged ELR program would benefit 432,900 people. The cost estimates for financing the ELR program in Tunisia have revealed how inexpensive the program would be. By Year 6, the net ELR wage bill is estimated at 2.74% of GDP, with a multiplier effect reaching 3.67% of GDP, and an increase in imports of only 1.24% of GDP. It was concluded that a comprehensive policy agenda must accompany the implementation of ELR in order to ensure its long-term success. In the absence of a multilateral financial system that promotes global full employment, we have established that even a small developing country like Tunisia can still achieve full employment and price stability. The most important policies required for such task include: regaining financial sovereignty over the domestic currency, adopting a functional finance approach to public finance, adopting a flexible exchange rate system, allowing complete convertibility of the TND in international exchange markets, and issuing only TND-denominated debt instead of foreign-denominated debt. We conclude that an ELR-development strategy is far superior than the traditional development strategies that have been implemented thus far, including ISI, export-led, and FDI-led growth strategies, all of which have led to jobless growth, and increased trade deficit and foreign debt.

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