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Title

The informal economy and gender inequalities in North Africa

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Policies addressing the formalisation of informality in North Africa: issues and outcomes

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Abstract:

According to standard definitions, the informal economy (or informality) includes three components, i.e. informal employment within the informal sector, the formal sector and households. Data sources prove disparate and statistical coverage remains poor in Algeria, Egypt, and Tunisia, as well as in Morocco. A threefold spectrum of theories addresses informality, dualism, structuralism and institutionalism. The persistence of informality translates into segmentation with respect to income gaps along the formal/informal divide, despite the mobility of workers on the labour market. Formalisation policies encapsulate conflicting issues and strategies as well as distinct methods. The moderate impact of formalisation policies proves more significant regarding the compliance of informal businesses than it extends social protection to informal workers, although enforced overall policies are more cost-effective than focused policies, due to economies of scale and spillover effects.

Keywords: businesses; employment; impact assessment; informal economy; policies; segmentation.

JEL: E26, J46, O17

Politiques de formalisation de l'informalité en Afrique du Nord : enjeux et résultats

Résumé

Selon les définitions standard, l'économie informelle (ou informalité) comprend trois composantes : l'emploi informel au sein du secteur informel, du secteur formel et des ménages. Les sources de données se révèlent disparates et la couverture statistique demeure médiocre en Algérie, en Égypte et en Tunisie, ainsi qu'au Maroc. Un triple éventail de théories aborde l'informalité, le dualisme, le structuralisme et l'institutionnalisme. La persistance de l'informalité se traduit par une segmentation des écarts de revenu selon la division formel/informel, malgré la mobilité des travailleurs sur le marché du travail. Les politiques de formalisation recouvrent des enjeux et des stratégies contradictoires ainsi que des méthodes distinctes. L'impact modéré des politiques de formalisation s'avère plus significatif concernant la conformité des entreprises informelles qu'il n'étend la protection sociale aux travailleurs informels, bien que les politiques globales renforcées soient plus rentables que les politiques ciblées, en raison des économies d'échelle et de leurs retombées.

Mots clés: économie informelle, emploi, entreprises, évaluation, politiques, segmentation.

Introduction

Despite the fact that Algeria is an oil-exporting upper middle-income country, whereas Egypt, Morocco and Tunisia are oil-importing lower middle-income countries, these countries share many common characteristics. Female participation rate to the labour market is significantly, whereas unemployment rate is dramatically high, especially among youth, small-scale informal businesses provide most jobs and tend to operate in low productivity sectors, and informal employment constitutes half the labour force (Purfield et al, 2018; Charmes, 2019). Hence, we focus upon the informal economy in these four countries from North Africa.

The informal economy (henceforth informality) has been a controversial issue since the discovery of the informal sector as of the early 1970s, half a century ago in Sub Saharan Africa (Charmes, 2019). Major stages of the definitions of informality will not dry up the controversy that feeds on the diversity of interpretations: the segmentation theory (Fields, 1975; 1990), the

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structuralist theory (Portes et al., 1989) and the institutionalist theory (De Soto, 1986). A first comparative analysis (Turnham et al., 1990) and the definition of the informal sector appeared in the early 1990s. In the 2000s, the informal component of the "Non-Observed Economy" (OECD, 2002) alongside the concept of informal employment (ILO, 2003) were coined, while comparative analyses multiplied. In the 2010s, the ILO (2013) provided a comprehensive definition of the informal economy and recommended transition towards the formal economy, while the World Bank designed and assessed formalisation policies targeting the informal sector (Benjamin et al, 2014).

Informality displays a contradictory prism of advantages and disadvantages: unfair competition from informal micro-enterprises *vis-à-vis* formal firms, tax shortfalls and subsistence jobs. Does formalisation make it possible to combine tax consent, the removal of barriers to entry and compliance with labour regulations? Can it reconcile the need not to curb entrepreneurship advocated by the World Bank, the Organisation for Economic Co-operation and Development - OECD and the International Monetary Fund –IMF, with the required social protection of workers according to the International Labour Office -ILO?

Section 1 addresses the definitions of informality including its three components, the informal sector and informal employment within the formal sector and households. Data sources are disparate and coverage is poor in Algeria, Egypt and Tunisia, and slightly improved in Morocco. Section 2 presents the threefold spectrum of theories addressing informality, i.e. dualism, structuralism and institutionalism, and discusses their differences and shortcomings. In Section 3, the persistence of informality translates into a segmentation in terms of income gaps, which may explain the mobility of workers on the labour market, and sketches an overview of the various methods investigating earnings differentials. Section 4 displays the conflicting issues and strategies as well as the various approaches of formalisation policies. Section 5 is devoted to impact assessment of such formalisation policies, the moderate impact of which proves more significant regarding the compliance of informal businesses than it extends social protection to informal workers.

1. The informal economy: definitions and stylised facts, sources and measurements

Informality encapsulates three components, i.e. the informal sector and informal activities within the formal sector and households. Despite standard definitions, data sources prove disparate and coverage remains poor in Algeria, Egypt and Tunisia, and to a lesser extent in Morocco.

1.1. Russian-dolls definitions and stylised facts in North Africa

The informal sector, coined by the ILO in 1993, includes the unincorporated enterprises, a subset of the institutional household sector, gathering both own-account workers and employers. These economic units, which provide some legal market output, are not registered or their employees or their size stands below five permanent paid employees.

Informal employment, again coined by the ILO in 2003, encapsulates all jobs carried out in both informal as well as in formal enterprises by workers who are not subject to labour regulation, income taxation or social protection. This is due to the absence of declaration of the jobs or the employees, whether casual or short duration jobs, jobs with hours or wages below a specified threshold, work place outside the premises of the employer's business. The extensive definition is based on non-payment of social contribution rather than the absence of social protection, in as much as individuals may access to social protection thanks to the contribution of another family member (Charmes, 2019, 18). Theoretically, the informal sector is included within informal employment like Russian dolls.

Informal employment or employment in the informal economy includes three components: (i) employment in the informal sector (the largest component), (ii) informal employment in the

formal sector and (iii) informal employment in households (domestic workers and household members producing goods and services for their own final use). Components are consistent with National Accounts, although there is no linear relationship between jobs and output with respect to labour productivity, the measurement of which remains disputable (Adair, 2020).

According to the expert benchmarking provided by Charmes (2019), North Africa is the region wherein which macroeconomic estimates of the informal economy are the most numerous since the 1970s. Taking stock, three stylised facts are worth mentioning.

First, average (non-agricultural) employment in the informal economy throughout North Africa has been growing slightly over 50 per cent in the 2000s and declining slightly below 50 per cent since the early 2010s. This suggest that informal employment is a lasting or structural phenomenon (Charmes, 2019, p. 41).

Second, informal employment is countercyclical: on rise when economic growth slows down until the late 2000s, it contracts with upgraded economic growth, hence experiencing a reversal in trend in the early 2010s. However, this general pattern requires a thorough inspection with respect to the behaviour of the various components of informal employment in North Africa. Furthermore, the trends as well as the level may differ across countries, according to the impact of economic shocks (structural adjustment and crises) and the employment policies designed to absorb these (See Adair and Souag, 2019, as for Algeria).

A last stylised fact is that employment in the informal economy is negatively related to GDP per capita; in this respect, Morocco experiences the lowest GDP per capita among North African countries and the highest share of employment in the informal economy.

Turning to a restricted picture of informality, i.e. the informal sector subset, it is noteworthy that labour productivity in the informal sector is weak; its contribution to GDP is low, whether or not agriculture is included (Charmes, 2019, pp. 72 & 74). As for Tunisia, apparent labour productivity in micro-enterprises in the informal sector is significantly lower than in other informal activities (Charmes and Ben Cheikh, 2016).

1.2. Disparate data sources and poor coverage

There are several discrepancies and deficiencies across countries with respect to data sources, coverage and thresholds regarding the components of the informal economy.

The informal sector enjoys consistent coverage only in Morocco, which reaches higher figures than in any other North African country (Charmes, 2019). *Informal employment* is gauged from retrieving labour force surveys, if relevant questions are included, though countries use different criteria for social protection coverage.

Algeria has recently updated the LFS. So far, no national household survey has addressed informal employment. Four household surveys investigated non-agricultural informal employment, using the same questionnaire. The survey of 1,499 active people from five regions in 2000 (Adair, 2002) was non-representative. A representative survey of 1,252 active people from the region of Bejaia was designed in 2007, and it was repeated in 2012 upon an enlarged sample of 2,026 active people from the same region (Adair & Bellache, 2018). A representative survey of 1,267 active people from the region of Tizi-Ouzou in 2013 was pooled with the Bejaia survey (Bellache et al, 2020). The sample of these last three surveys was representative at regional level, although not representative at nationwide level.

No business statistics regarding the informal sector and microenterprises were provided. Only a piecemeal survey took place in Tizi-Ouzou (Babou & Adair, 2016).

As for *Egypt*, the same comment applies: no national household survey was devoted to informal employment.

Business data on Micro- and Small and Medium size Enterprises (MSMEs) prove scarce and the informal sector did not benefit from any specific survey. However, Central Agency for Public Mobilization and Statistics (CAPMAS) and the Economic research forum (ERF)

surveyed a representative sample of 3,550 household firms in 2012 and 2018. 62.5 per cent of the sample include self-employed (one-person firms), 31 per cent are micro firms (with 2- to 4 workers), and 6.5 per cent are small firms (with at least five workers). Most of the firms in the sample are informal (67.8%) and their rate is increasing over time. Worth mentioning is that the threshold for microenterprises (five employees at most) is inconsistent with recommendations from the ILO, and it overlaps the threshold of the World Bank Enterprise Survey (WBES), i.e. below five employees.

Morocco is the only country that did achieve three representative surveys (1999, 2007 and 2013) devoted to the informal sector. The informal production units (IPU) come from a representative household survey (HCP, 2016); three out of four units including only one worker. As for Tunisia, there were neither attempts to measure informality from a range of questions in the employment surveys, nor specific surveys on the informal sector since the late 1980s (Charmes & Ben Cheikh, 2016). A five-year survey of microenterprises took place in 1997, 2002, 2007, 2012 and 2016. Unfortunately, the threshold for microenterprises (fewer than 6 employees) is inconsistent with the thresholds below five employees (ILO and the WBES). A survey was exclusively devoted in 2015 to youth (16-29 age group) upon a balanced sample of 3,027 active people from five MENA countries, among which Algeria, Egypt, Morocco, and Tunisia were investigated. Merouani et al (2018) notice that young workers do not enjoy (and look for) social protection. The high prevalence of informal employment among youth cannot extrapolate to all age groups (Gherbi et al, 2019; Gherbi and Adair; 2020). However, it may

look for) social protection. The high prevalence of informal employment among youth cannot extrapolate to all age groups (Gherbi et al, 2019; Gherbi and Adair; 2020). However, it may prove consistent with the U-shaped prevalence, declining from youth to maturity and rising again for the older age group in Algeria (Adair & Bellache, 2018). It confirms the conclusion from Gatti et al (2014) using different data sources upon youth aged 16-24. In Tunisia, less than one in three young workers enjoyed a formal work contract and access to social protection (World Bank, 2014).

2. A threefold spectrum of theories tackling informality

In as much as theories provide the underpinnings of (formalisation) policies, it is worth presenting the threefold spectrum of theories that tackle informality, namely dualism, structuralism and institutionalism, as well as discussing their analytical differences and shortcomings. In addition, we pinpoint main causes of informality, which stem from jobless growth and institutional deficiencies.

2.1. Dualism, persistent informality and segmentation

Informality is not included in the first generation of dualistic models, be it the Ricardian macroeconomic model (Lewis, 1954; Fei and Ranis, 1964) or the job-search microeconomics model (Harris and Todaro, 1970). They explain from the labour supply-side the process of labour migration from the traditional/agricultural or rural sector to the modern industrial/urban sector. If informality is an archaic remain, the determination of the real wage in the modern sector depends on the real wage in the traditional subsistence sector and it rises alongside the productivity in the traditional sector. Informality is doomed to disappear because of growth and modernisation absorbing the labour surplus (disguised unemployment). However, if informality proves persistent, the determination of the real wage in the modern sector does not depends on the real wage in the traditional subsistence sector, and it stands above the competitive level, especially due to barriers to entry. According to Fields (2004, 2006), informality is grounded on the dualistic model of Lewis (1954), which defends these two opposing interpretations of the demise vs. persistence of informality.

Wu & Schneider (2019) run against the optimistic conclusion of the Lewis model according to which the informal economy will disappear once the economy has reached a given level of development.

Persistence fits the less optimistic interpretation of the Lewis model, leaving room enough for the segmentation theory, workers entering informal employment by choice or necessity. Labour market segmentation would better explain the gap of 30% between wages in the modern (formal) sector and subsistence incomes in the traditional (informal) sector initially that Lewis (1954) first identified.

2.2. Structuralism and informal/formal subjection

The structuralist thesis (Castells & Portes, 1989) considers that the informal economy is subjected to the formal economy through subcontracting, which reduces production costs (including labour costs). For instance, it applies to the textile industry or call centres in Tunisia or in Morocco. This is a large framework, which proves uneasy to test.

2.3. Institutionalism and the promotion of microenterprises

The legalistic/institutionalist approach (de Soto, 1986; 2013) addresses small firms, in particular the informal sector, from the business side perspective. It advocates the formalisation of existing informal possession, and claims the necessity to reducing radically the time and costs borne by start-ups to obtain a license to operate a business legally. Main assumption is that informality is the product of bad regulation from the State and excessive bureaucracy harnessing the development of these small firms, which applies especially to Tunisia (de Soto, 2012). Hence, informal entrepreneurs (i) voluntarily step outside the formal economy, a rational economic decision resulting from the rejection of bureaucratic obstacles, or (ii) are excluded from access to institutions that are supposed to protect private property, but prove corrupted or failing

This approach is part of the World Bank's studies devoted to entrepreneurship indicators (e.g. *Doing Business*) since 2003, which identify barriers to entry and rank countries accordingly. Morocco ranks fairly high among North African countries.

However, World Bank Enterprise Surveys (WBES) pay little attention to micro-enterprises. For instance, the 2019-2020 WBES devoted to Moroccan companies covers very few micro-enterprises (10% of the 1,096 businesses sample), although they account for more than 90% of all businesses. All WBES conducted in Morocco (2006, 2013 and 2019), as well as in Egypt and Tunisia (Berguiga & Adair, 2019) lack of representativeness, are strongly biased and cannot be used to investigate the informal sector.

2.4. What causes persistent or even rising informality?

Among multiple drivers of informality, macroeconomic and institutional factors play a major role.

The first main cause of persistent/rising informality is low growth or jobless growth, the formal economy being less able to provide jobs to an increasing labour force (Chen & Harvey, 2017). Hence, economies have not reached the Lewis "turning point", which occurs when labour surplus is fully absorbed (Ranis, 2004). This cause fits in the segmentation model, which require some additional explanation in terms of productivity differentials and gaps in human capital.

The other main cause is inadequacy of regulatory framework and weak enforcement of labour contracts and social security inspectorate. Excessive regulation by the State, which creates incentives for economic activity to operate outside the purview of regulations. It fits in the institutionalist approach. Regulation may explain the level of informality, a disputable assumption with respect to public goods provisioning vs. corruption. It does not explain the increasing trend in the informal sector, unless the regulatory burden is rising. This explanation is mostly focusing on the informal sector and microenterprises, although it could be extended to informal employment

For analytical purposes and policy issues, it is worth emphasizing that theories of informality do not stand either on the same market or on the same side of the market (See Figure 1). Segmentation theory stands on the supply-side of the labour market, whereas institutionalist theory stands on the demand-side of the labour market (alongside structuralist theory), hence on the supply-side of the market for goods and on the demand-side of the credit market.

Figure 1. Theories of informality and markets

Dualistic theory	Institutionalist theory	Structuralist theory
Markets for factors	Labour market	
Supply-side	Demand-side	Demand-side
Markets for factors	Credit market	
	Demand-side	
Markets for goods & services		
	Supply-side	Supply-side

Source: Author

3. Labour market segmentation and occupational mobility: Assessing earnings differentials

The concept of segmentation here refers to differences in labour income, which cannot be explained by the individual attributes of labour supply (human capital, for example), and which would be associated with certain characteristics of labour demand, employment itself. This is the case where two workers with equivalent personal attributes receive a different remuneration, because of one working in the formal sector and the other in the informal sector or in formal or informal employment respectively.

We assess income gaps between informal and formal employment using four distinct methods, which test labour market segmentation.

- (i) Earnings functions à la Mincer use Ordinary Least Squares (OLS), estimating the average gaps resulting from differences in human capital (education and experience) between formal and informal employment. Human capital plays a small role in informal employment. Average wages are 20% to 30% higher in the formal sector. Non-wage earnings are poorly measured. For instance, Adair & Bellache (2018) in a survey conducted in 2012 on a representative sample of 2,026 workers in Algeria estimate, the average monthly wage gap (30%) and median (25%) of employees in the formal sector vis-à-vis informal sector employees in favour of formal employment.
- (ii) Quantiles regressions measure the distribution of income gaps. They show whether such differences concentrate or not at the ends of distribution, and whether they remain constant or vary over time. Distribution pattern differs according to female gender and informal jobs concentrated in the lower quantiles vs. male gender and formal work status concentrated in the upper quantiles. Gherbi & Adair (2020) and Babou et al (2020) document this issue with respect to North Africa and Algeria.
- (iii) Oaxaca-Blinder decomposition models of formal and informal average income gaps resulting from differences in characteristics (including human capital) and their yields for each category of workers; identifying an unexplained component that is possibly demand-driven by discrimination. For instance, Gherbi & Adair (2020) and Babou et al (2020) as for respectively North Africa and Algeria.
- (iv) An experiment based upon the gap between the average income of an informal worker and income that would be earned from a formal job, i.e. the counterfactual income of an informal worker.

Segmentation between formal and informal employment does not impede occupational mobility

As for Algeria, Adair & Bellache (2018) observe the co-existence of segmentation on the labour market and mobility between segments, including from informal to formal rather than conversely. According to a longitudinal analysis of 445 workers in Algeria between 2007 and

2012, mobility affects almost half of the cohort. This mobility is asymmetrical: nearly three out of four workers in the formal sector (self-employed or salaried) are not mobile, while three out of five workers in the informal sector are mobile. Mobility concerns informal employees and is far more likely to drive from the status of employee to that of self-employed than in the opposite direction, thus corroborating the thesis of Fields (1990) and the theory of segmentation.

In terms of transitions, Gatti et al. (2014) found that informal employment in the Middle East and North Africa region is most prevalent among young people aged 15-24, before the transition to the public sector takes place, and then informality declines rapidly.

Tansel & Ozdemir (2019) use Markov chain models and multinomial logit models over 2006-2012 to address transitions according to gender in Egypt. They observe that most of the individuals except the unemployed in the male sample remain in their initial labour market states.

Woldemichael et al (2019) apply a dynamic random effects estimation of labour market entry and exit in Egypt, whereby gender and education are main significant factors in labour market rigidity in Egypt. Labour market mobility in Egypt over 1996–2006 represent individuals moving from self-employment and unemployment into formal wage/salary sector, mainly into the public sector. Later on, self-employment increases dramatically, absorbing the unemployed and new labour market entrants. Almost 48 percent of the labour market rigidity in Egypt can be explained by individual -level factors, whereas the remaining 52 percent are due to lack in demand and institutional, regulatory, and other factors.

4. Formalising the informal economy: A three-player game

The formalisation of informality raises several issues: Why formalise. Are issues conflicting? What are the targets according to international institutions?

4.1. Why formalise?

- (i) As for workers and/or employers, the issue is linked to the labour market, consisting in improved access to rights at work, social security and decent working conditions as well as improved access to representation and national policy dialogue.
- (ii) Regarding businesses, there are several issues related to the markets for factors and for goods: enlarged access to credit and other productive factors, including through public programmes; extended access to markets with participation in public procurements, access to imports and exports through formal channels; shrinking the influence of corruption and promoting greater respect for commercial contracts.
- (iii) As for society and the State, several issues consist in broadening the tax base (enlarging the scope of public action, reducing tax rates) and improving efficiency and sustainability of preventive and compensative measures to address risks. Also, increasing fairness with respect to the contribution to public budget and to benefits of redistributive policies, as well as competition in national and international markets, which promotes greater social cohesion.

4.2. Are issues conflicting?

The above issues may be conflicting with one another.

- (i) A for employees: extending social protection to informal employees constitutes an advantage, which increases labour costs for (informal and formal) enterprises.
- (ii) Regarding businesses, unfair competition of informal enterprises *vis-à-vis* formal enterprises concerns provisioning (micro) local markets and subsistence activities, neither public orders, nor exports.
- (iii) As for the State, provided the relevant tax target is identified, there is a trade-off between upgrading tax receipts to finance public goods and *laissez-faire* to avoid social unrest (See Box Appendix 1).

4.3. What is the target according to international institutions?

International institutions advocating formalisation are not necessarily targeting the same informal economic agents. Entrepreneurs according to the World Bank vs. employees according to the ILO, this would answer the question: Who is in charge of what and for whom?

Informality is a prism of advantages and disadvantages with respect to competition, subsistence jobs and tax shortfalls. Does formalisation make it possible to combine the removal of barriers to entry, compliance with labour regulations and tax consent? Can the promotion of entrepreneurship, a requirement advocated by the World Bank and the IMF, reconcile with the claim for social protection of workers that the ILO supports?

If entrepreneurs or businesses are the target, formalisation depends on an upgraded access to market for goods and the credit market, as well as training in accounting but also hiring on the labour market (interns and/or apprentices).

Hence, employment is an issue and Recommendation 204 adopted at the 2015 International Labour Conference, (Transition from the Informal to the Formal Economy Recommendation, 2015), includes some key provisions for those informally employed, both self-employed and wage employed. International institutions and governments in charge of implementing appropriate policies should share and promote such key provisions.

As a sign of convergence, in their report to the World Bank on the MENA region, Gatti et al (2014) use as the standard definition of informality the share of the labour force that does not contribute to social security, which is consistent with the definition of informal employment from the worker/social protection perspective according to the ILO...

However, the IMF set up in 2018 a conference gathering over 20 countries from the MENA region, "Opportunity for All: Promoting Growth, Jobs and Inclusiveness in the Arab World", which does not address explicitly informal employment. It provided a forum for public officials, private sector representatives, and civil society to share their views about low growth, inequality, and government accountability and corruption. (Purfield et al, 2018).

5. Impact assessment of formalisation policies provide mixed evidence

We first address the range of formalisation policies. Second, we review the targets -businesses vs. employment, and the tools –incentives and penalties- of these policies. Last, we sketch a review of formalisation policies in North Africa, a topic that remains little documented. In this perspective, we discuss the scope of formalisation -focused policies vs. overall policy- and the outcome of quasi-experimental testing.

5.1. A broad range of formalisation policies

What is the meaning of formalisation? The answer depends on what problem associated with informality one is trying to solve; or what benefits of formality one is trying to extend to the informal workforce (Chen & Harvey, 2017).

Due to the heterogeneity of informality and several drivers, there is a broad range of policies affecting the transition of informality towards formalisation.

A first distinction should be made between policies that explicitly aim to tackle informality vs. policies that influence formalisation without explicitly aiming at formalisation (e.g. growth strategies, education policies). Policies that affect transversal drivers of formalisation (e.g. strengthening governance of social security system) is another broad category. Last, policies that target specifics categories of economic units (e.g. special schemes for micro and small enterprises), or workers (e.g. bringing domestic work under the scope of labour law), and the component of informality (e.g. undeclared work in formal enterprises).

5.2. Targets and tools: Businesses vs. employment, blending incentives and constraints

We take stock of a recent survey upon impact assessment of formalisation policies (Jessen & Kluve, 2019) to design a double distinction between targets - businesses vs. employment- and tools –a blend of incentives and constraints (carrot and stick).

Formalising businesses using incentives (carrot) is threefold. (i) Information campaigns on the procedures and benefits of business registration, alone, remain ineffective; (ii) single windows simplifying business registration and incentives to reduce taxes as well as social security contributions prove effective; (iii) shrinking registration costs for businesses and providing a bonus to those willing to register, the positive impact of which depends on the amount.

Formalising businesses using penalty (stick) includes (iv) the action of the labour inspectorate to enforce the law, which has a minor but significant impact on the formal employment of workers and persists for several years.

Effectiveness depends on the combination of carrot and stick.

Formalising employment is built on (v) simplification of the registration of workers, reduction of taxes and social security contributions. Extending social protection to informal workers is an issue in Algeria, Morocco and Tunisia (Lapeyre, 2020).

Jessen & Kluve (2019) point out that formalisation policies come from five Latin American countries in more than three out of five cases. Impact assessment is a very recent requirement: about three quarters of (134) interventions were implemented in 2010 or later. Impact study covers a maximum time span of 24 months (80% of cases) and concerns enterprises more than employment, although formalisation policies targeting workers proves more effective than targeting enterprises. Policies implemented on a macro scale yield generally positive and small-scale effects that are more effective than are those resulting from a group or region-specific policy.

5.3. Focused policies vs. more inclusive policies

Hereafter, we provide examples regarding focused policies vs. more inclusive policies. The former is best highlighted by the role of microfinance in funding microenterprises and supporting female entrepreneurship in Egypt, Morocco and Tunisia. The latter is illustrated by case studies of "natural" experiment testing in Algeria and Egypt.

Access to credit is paramount for female entrepreneurs, who are assumed poorer than their male counterparts are. In as much as informal (micro-), enterprises are financially excluded from the banking system due to high costs upon small loan amounts, absence of collateral and expected default risk, the microfinance industry is able to provide financial products to those excluded. Funding provided by the microfinance industry displays a more reliable picture of microenterprises. Berguiga & Adair (2019) point out that World Bank Enterprise Survey (WBES) devoted to North Africa are strongly biased, whereby unrealistic figures for informal firms account for only 8.6 per cent in Egypt (2016) and 3.1 per cent in both Morocco and Tunisia. Among twelve Microfinance Institutions (MFIs) from Morocco, Egypt and Tunisia (MFIs are missing in Algeria) as of 2012, over eight out of ten active borrowers (almost 1.3 million) are Microenterprises, informal for some of them. Average loan balance per borrower is small (\$520), thus businesses can afford funding only working capital rather than fixed assets, suggesting that they are subsistence activities (See Table 1, Appendix 2).

Egypt passed Law 141 as of 2004, which provided an institutional framework for assisting the growth and development of MSEs and encouraging formal registration. Three-year tax exemption (beginning one year after registration) for new businesses and open tax forgiveness for existing firms leaving the informal economy (Subrahmanyam, 2016). In parallel, penalties for tax evasion were increased. To make the process easier, faster and cheaper, and thereby remove a barrier to formalisation, procedures for business registration were streamlined and

simplified. One-stop shops were set up, minimum capital requirements were eliminated, and flat fees were introduced. Tax reforms passed in 2005 reduced the income and corporate tax rates. Thus, the number of businesses formally registering in Egypt grew 35 per cent between 2005 and 2012. However, this carrot and stick policy had limited success in curbing informality because of inefficiencies, high costs and an overly narrow policy focus.

Public policies have tended to focus on informal enterprises – in line with CAPMAS's 'enterprise-based approach' to defining informality – rather than on informal employment, focusing on ways of regulating formal firms that hire workers on an informal basis. Hence, formalisation policies likely resulted in the transfer of workers from the informal sector to the formal sector under informal arrangements. Policies developing the potential of informal sector firms were also unsuccessful, because they failed to target micro and small enterprises and to remove the barriers in accessing credit and thoroughly assess these programmes.

The non-parametric method of matched estimators (Difference in Difference –DiD) identifies the average effect of treatment (impact of a shock or reform) on the category of workers treated compared to the situation of the control group of untreated workers bearing similar characteristics.

Using DiD, Souag et al (2018) conclude that the policy promoting entrepreneurship has a limited impact on the registration (formalisation) of businesses and a small impact on the formalisation of employment in Algeria. The cumulative impact of employment policy measures on unemployment in Algeria from 1997 to 2013 is modest compared to the 300,000 new job seekers per year (university graduates, young people from vocational training and youth drop out of school). In Algeria, informal employment increases when unemployment falls and is therefore not a counter-cyclical variable. Informal employment absorbs unemployment from 2003 to 2011 and it is therefore a solution, not a problem (Adair & Souag, 2019).

A series of studies address the case of Egypt, which faced political turmoil in 2011, alongside Tunisia, as a "natural" experiment.

Elsayed & Wahba (2017) examine informality during the turmoil of the uprising of 2011 in Egypt, focusing on unprotected employment and the extent to which it changed by educational level, suggesting a high level of labour market rigidity. They find that informal employment has increased for both high- and low-educated workers however, through different paths: high educated were more likely to be stuck in informality, whilst low-educated formal workers were more likely to lose their contracts.

Ali & Marouani (2020) find a positive effect of formality on labour productivity although it has a significant negative impact on firm's profitability and has no effect on employment within firms. Using a propensity score matching and a difference-in-difference estimation, the effect of formality differs across firms in terms of observable characteristics, the timing of the effect, and according to transition in formality status. The positive effect of formality is stronger for microenterprises owned by less educated and female entrepreneurs who do not have a work social insurance. The positive effect on labour productivity declined significantly after the 2014 economic reforms with an exception of firms that became formal by 2018.

Conclusion

Informality is a major challenge in terms of fostering both employment, absorbing youth in the labour force, and growth, increasing output and the productivity of microenterprises, and extending decent employment standards.

Hence, the topic requires systematic improvement in survey questionnaires (e.g. in labour force surveys), enhanced data collection and dissemination of datasets, alongside a critical review of biases that hamper conclusions.

There is a broad range of formalisation policies, such as macro-level drivers improving inappropriate macroeconomic framework and struggling against inefficient public institutions.

Such as extending coverage of labour regulation and social security, promoting minimum wage and enforcing labour contracts, as well as extending the scope of the laws, fostering registration and increased compliance with tax, labour and social security authorities.

Processes may follow several paths towards formalisation, using a blend of stick-and-carrot scheme upon economic units (e.g. micro and small enterprises) and category of workers (e.g. domestic workers). Stick is more efficient than carrots (Tansel, 2016).

Youth labor market is a big challenge in North Africa and Active Labor Market Policies (ALMPs), blending education and training, promoting job creation and entrepreneurship, and enforcing formalisation are crucial. Enforced overall policies are more cost-effective than focused policies, due to economies of scale and spillover effects.

Formalisation processes can take quite a long time before proving (moderately) successful. Monitoring and assessing policies are main requirements in this respect. Social acceptance (Duman, 2021) or better, social support is key for success.

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Appendix

Appendix 1. 1mproving tax returns from companies. What is the target?

According to the doctrine of the IMF, tax reform must combat tax evasion and enhance tax compliance from the informal sector.

Three main categories of production units must be distinguished.

1. Micro-businesses, with maximum sales below the tax threshold that report truthfully and pay no taxes, and "opportunists" whose maximum sales would be above the threshold that choose, legally, to operate just below the tax threshold to avoid tax and compliance costs. This category includes the informal sector.

Setting a low threshold in order to include a larger number of informal businesses into the tax system may prove irrelevant.

2. "Cheaters" and "ghosts" producing above the threshold and reporting their sales, only partially below the threshold, or not at all. This category is the target for adjusting relevant tax threshold in terms of optimising tax performance and fairness of the burden.

Targeting "ghosts" in the first place invalidates the argument according to which the tax rate should be set as low as possible, thereby broadening the tax base.

3. Large businesses reporting their sales and paying full taxes.

Source: Author, from Kanbur and Keen, 2015

Appendix 2. Table 1. Selected sample of MFIs in North Africa (2012)

Country	MFIs	s NABª –	Number of applicants and share (%) of loans granted				Lending rate (%)	Average loan amount ^b	
			MSMEs	Micro	SMEs	Solidarity groups	Female borrowers	;	
Egypt 5	5	593,112	586,388			342,196	384,145		
			(98.86)	82.06	16.8	(57.69)	(65.42)	34.3	\$234
Morocco 6	6	702,212	669,803			330,149	394,296		
			(95.38)	87.86	7.52	(47.23)	(56.23)	36.35	\$772
Tunisia 1	1	239,825	191,658	97,91	0.00	0.00	157,364		
			(79.92)				(67.97)	25.46	\$493
Total		1,535,149	1,447,849	1,295,380	152,469	673,848	935,805		
			(91.38)	(84.38)	(9.93)	(46.58)	(63.2)		\$520

Note: a Number of Active Borrowers. b 2014 (MIX, 2015)

Source: Berguiga & Adair (2019) from the MIcrofinance eXchange market (MIX).