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Gendered perspectives on economic growth and development in sub-Saharan Africa

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Abstract: Researchers have linked sub-Saharan Africa's (SSA) poor growth performance in recent decades to several factors, including geography, institutions, and low returns to investment. This literature has not yet integrated the research that identifies linkages between gender, economic development, and growth, however. This paper explores the macro effects of gender, transmitted via the productive sector and in the household, in part due to the tendency for work—paid and unpaid—to be gender-segregated. Macro-level policies in turn can have differential effects on men and women. Evidence that gender equality is itself a stimulus to growth in a number of SSA countries underscores the importance of assessing the gender effect of macroeconomic policies.

Keywords: gender, economic development, growth, sub-Saharan Africa, macroeconomic models, fiscal policy

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1 Introduction

After years of stagnation, African economies are exhibiting promising growth prospects and an encouraging development record. Enhancing, sustaining, and ensuring an all-inclusive growth trajectory remains a challenge, however, given the evidence of wide and persistent economic disparities on the continent. Recent research provides evidence that intergroup equality, and in particular, gender equality can be a stimulus to growth and development. The research that identifies the macroeconomic role of gender has yet to be integrated into the long-term growth and development research on Africa, however.¹ In an effort to address this lacuna and to forge a link between these two literatures, this paper explores theories on the role of gender equality in economic growth and development, as well as the implications of macroeconomic policies on gender outcomes, focusing on the sub-Saharan Africa (SSA) region.

2 Engendering macroeconomic growth and development theories

In recent decades, observers have linked SSA's poor growth performance to several factors—geography, institutions and, more recently, ethnic diversity. In many ways, these analyses have been backward looking, attempting to explain why Africa has failed to grow as rapidly as other developing regions. A newer approach to development and growth analysis has been the strategy of growth diagnostics, a tool for identifying country- and region-specific constraints to improving living standards (Rodrik 2007) and policy priorities. Using this approach, Ndulu et al. (2007) identify low returns to physical and capital investment, a demographic burden that results in a high dependency ratio, limited diffusion of technology, and weak institutions as the most important constraints on SSA growth.

Starkly absent in this literature (and, in particular, from growth diagnostics) is the role of gender in influencing macroeconomic wellbeing. The knowledge gap can impede efforts to stimulate growth in SSA, given the growing body of research that demonstrates the importance of micro-level gender relations as a macroeconomic variable.

A major intellectual project that offers insights for macroeconomic growth and development theory is feminist economic analysis, which has contributed to understanding the gendered nature of the economy itself and of institutions beyond the household that contribute to macroeconomic outcomes, including governments, firms, and markets. This analysis shows that integration of the role of gender—and gender inequality—in macroeconomic theory, economic institutions, and processes offers a better understanding of the factors influencing economic growth and development, balance-of-payments, and fiscal sustainability of public spending. With this understanding, an important next step is to 'engender' traditional macroeconomic theory in order to trace the feedback loops between gender relations at the micro level and macroeconomic outcomes. The lessons from this research caution us that failure to attend to gender effects can lead to weak, ineffectual, and indeed harmful macro policy decisions. Moreover, to the extent that policy makers desire to improve broadly shared wellbeing, intergroup inequality of gender remains a central target of concern.

¹ Two special issues of *World Development* (November 1995 and July 2000), as well as the July 2009 special issue of *Feminist Economics* showcase this body of work. See also, van Staveren et al. (2007).

A key finding of this body of work is that gender inequality affects development and growth, and is itself endogenous—that is; macroeconomic policies and the pace of growth influence the degree of gender equality. Structural adjustment programmes in Africa provided the initial impetus for this research. Economic reforms in the 1980s called for cutbacks in state services such as health care, food subsidies, and education. Feminist economists noted the failure to consider how such changes affected the relationship between the ‘productive’ economy and the ‘reproductive’ economy (Gladwin 1994; Elson 1995). Public spending cuts to health and services transferred the burden of providing care to households where mostly women undertake unpaid non-market work. Already time poor, women were the unacknowledged shock absorbers who helped households to adjust to cuts in state level spending (Blackden and Wodon 2006; Sewpaul 2008). Perhaps because unpaid work is invisible in national income accounts, these dynamics that severely strained women’s wellbeing went unnoticed. As we will see later in this paper, increased time burdens for women can contribute to reduced economy-wide human capacity development, with significant and long-lasting effects on children’s future productivity.

A second gendered policy prescription in structural adjustment programmes was to shift production from nontradable goods to tradables to address balance-of-payments constraints. Assumptions about the human resources required for the shift failed to account for the barriers to labour re-allocation due to rigid gender rules of the division of labour and control over resources, with implications for food security. For example, in SSA, men tend to control incomes from cash crops. As a result, they were largely the beneficiaries of the re-alignment of incentives to promote cash crop exports. This increased male bargaining power within the household, diminishing women’s ability to direct resources to their own and their children’s wellbeing. This outcome is due in part to the fact that household income is frequently not pooled, and men’s and women’s spending priorities differ (Haddad et al. 1997).

These are just two examples of the differential gender effects of macroeconomic policy, whether intended or not. These effects stem from a variety of factors: A persistent (although varying) gender division of labour within and outside the household and systematic gender inequality in access to and control over resources. Mainstream macroeconomic analysis, which overwhelmingly focuses on the paid economy, has until recently ignored unpaid or non-market work. This stands in contrast to microeconomic analyses of intrahousehold resource allocation, reproductive labour, and non-market production. And yet, a significant proportion of total economic activity of the developing world takes place within families and households. Care work, reproductive labour, and subsistence production are integral to the wellbeing of the household and the formation of human capacities used in market production (Folbre 2014).

3 The role of gender inequality in influencing economic growth and development

How would an expanded theoretical framework that incorporates the role of gender in explaining growth and development theory differ from current approaches? A starting point for understanding the role of gender, and in particular gender (in)equality in influencing growth and development is to clearly identify the salient forms of inequality to better understand the transmission mechanisms. Gender inequality occurs in three key domains: *capabilities*, *livelihoods*, and *empowerment/agency*. *Capabilities* refer to the functionings required to engage in productive work (paid or unpaid). Literacy rates, educational attainment, and indicators of health and nutrition are commonly-used measures, with gender inequality measured as male-female gaps or female/male ratios. *Livelihoods* indicators assess the extent to which women and men are able to apply their functionings to productive activities. Examples of indicators include access to credit, employment, wages, and ownership of assets. Finally, *agency* refers to the ability to participate in

decision making at the household, community, and national level and in the workplace. Measures include female shares of political representation and of supervisory and managerial positions. In this paper, we focus on the research that links capabilities and livelihoods inequality to macro-level outcomes.

An important finding of the macroeconomics research incorporating the role of gender is that the impact of micro-level gender relations on the macroeconomy will differ, depending on the structure of the economy (for example, agricultural, labour-intensive manufacturing, or knowledge-intensive economies). Gender is an important marker of job access, due to norms and stereotypes, which implicitly or explicitly define jobs or tasks as ‘male’ or ‘female’. We observe that women tend to be concentrated in certain occupations or sectors such as labour-intensive manufacturing industries, subsistence agriculture, and service sector jobs in health care and education. This holds for both SSA and also for other regions of the world. Men in SSA tend to dominate in cash crop production and in jobs in extractive industries as well as blue collar jobs, such as electricians, plumbers, and truck drivers.

Job segregation is in part due to gendered patterns in job choice, often due to social pressure based on norms that identify tasks with a particular gender.² It may also result from employer bias. For example, men may be offered positions with a job ladder, more secure hours of employment, and benefits while women are more likely to be concentrated in occupations and sectors with lower pay on the bottom rungs of job hierarchy. Contrary to neoclassical assumptions, even if women and men are equally qualified, female and male labour are not seen as perfect substitutes as a result of the rigidity of social norms. Because jobs are gendered, the structure of the economy plays a role in determining the relative demand for female and male labour.

Gender effects on the macroeconomy may vary in the short run versus long run. Wages and credit, for example, will have more immediate macroeconomic effects while capabilities variables are slower to produce discernible macroeconomic effects. An example of the latter is gender gaps in education, which are transmitted to the macroeconomy with a lag via effects on fertility and investments in children. Indeed, it is the distinction between the short and long run that contributes to a heated debate amongst theorists and empiricists on the macro-level effects of changes in the degree of gender inequality.

The complexities of economic structure, measures of inequality, and the gender division of labour make it impossible to arrive at universal, time-invariant generalizations with regard to gender effects on macroeconomic outcomes; instead, such effects are context specific. Generalizations are further complicated by the different approaches to macro modelling. Neoclassical theoretical and empirical approaches almost exclusively emphasize the long-run effects of capabilities inequality on economic growth (Klasen and Lamanna 2009). Few neoclassical economists focus on the implications of wage inequality in the short run. Those who take wages into consideration do so in long-run models that emphasize fertility effects within the household (Galor and Weil 1996) rather than, for example, wage effects on firm profitability and product demand. As a group, neoclassical models that incorporate gender are one size fits all. That is, they do not incorporate specific features of economies that interact with gender relations (such as job segregation and trade and investment policies) and macroeconomic performance.

² Male and female tasks differ by country or region. In addition, tasks defined as female tend to be of systematically lower status and less remunerative than male tasks, regardless of the patterns of job segregation.

In contrast, heterodox macroeconomic models address underlying power relations and the interconnection of gender relations with other social and economic relationships, including intrahousehold resource allocation. Further, structuralist macroeconomists and feminist economists (the two groups overlap) account for short- and long-run effects, and the role of inequality in livelihoods, measured as access to employment, gender wage inequality, and asset inequality. By virtue of the focus on income, wages, and assets, this second strand of literature sheds light on the role of bargaining power within both households and labour markets in contributing to inequality and its effect on growth (Doss 2006; Berik, et al. 2009). We briefly discuss each of these bodies of work and highlight their contradictory findings.

3.1 The short run

Short-run stabilization remains a key area of inquiry of macroeconomists. In its own right, macroeconomic instability is cause for concern, particularly in poor countries where the possibilities to smooth income are constrained. Moreover, short-run fluctuations in the macroeconomy can lead to hysteresis on the supply side, thus dampening long-run growth prospects (Dutt and Ros 2007). As a result, short-run demand-side effects of efforts to promote gender equality are of great interest and reveal information about the sustainability of efforts to narrow gender gaps in wellbeing.

Theorists identify short-run effects of gender on the macroeconomy as operating through the *livelihoods* domain where the indicators, such as wages or access to credit, are fast-moving variables with notable short-run effects. This contrasts with gender equality in capabilities (say, in educational attainment or health), which is likely to be transmitted to the macroeconomy, as noted, with a substantial lag.

A straightforward framework for identifying the net effect of greater gender equality in the short run is to evaluate its impact on each of the components of the macroeconomic equilibrium condition in an open economy

$$I + G + X = S + T + M \quad (1)$$

where I is business spending, G is government spending, X is exports, S is savings, T is taxes, and M is imports. The balance of payments constraint in the short run is simply net exports

$$NX = X - M \quad (2)$$

where NX is net exports.³

A key question regards the macroeconomic effect of a redistribution or improvement in women's relative access to key resources such as wages or credit. Would greater equality have a differential effect on injections versus leakages, thus leading to an economic expansion or contraction? And would the balance of payments be affected? If the net demand-side effect is

$$I + G + X > S + T + M,$$

³ For fully developed engendered macro models of this genre, see Braunstein (2000), Blecker and Seguíno (2002), and Braunstein et al. (2011).

the impact would be expansionary and thus gender co-operative. That is, in this case, gender wage equality is consistent with an expansion of aggregate demand and job growth, thereby benefiting both women and men absolutely (though women gain more, relatively). Conversely, if higher female wages (or greater relative access to credit) result in leakages exceeding injections or $I + G + X < S + T + M$, then output and employment fall. This is a potentially gender conflictive outcome if men's employment is negatively affected by economic contraction. Similarly, a narrowing of the gender wage gap that reduces X more than M worsens the current account and thus balance of payments.

The research to date suggests that shifts in wages and other livelihood variables, such as access to credit, have discernible impacts on the macroeconomic equilibrium condition and balance of payments constraint. Although much more empirical work is needed to clarify the effects on individual components of the equilibrium condition, we can make a few generalizations, based on inferences about the structure of the economy. To facilitate this, we group developing countries into semi-industrialized export economies (SIEs) and low-income agricultural economies (LIAEs). Examples of SIEs are South Africa and Mauritius, as well as Thailand, Honduras, China, Brazil, Turkey, and Mexico. LIAEs include many SSA economies, and countries such as Pakistan, Paraguay, and Nicaragua, to name a few.

In SIEs, women workers tend to be concentrated in labour-intensive export industries—the kind of firms that can easily relocate if local resource costs rise. The demand for goods they produce is price elastic since the goods tend to be relatively homogenous and there are ample substitutes, globally. Given the gendered pattern of job segregation in SIEs, higher female wages are likely to have relatively large negative effects on both exports and investment (Seguino 1997, 2000; Busse and Spielmann 2006). Higher female wages that reduce gender wage gaps are thus very likely to be contractionary. As a result, we can anticipate that in countries where female wages are relatively lower than those of (equally qualified) men, export growth rates will be higher. Mauritius is an African example of such an economy in which low relative female wages have fuelled exports and growth. Female wages are half of those of men in that country, and this gap is only partially explained by productivity differentials (Nordman and Wolff 2010). Mauritius thus owes part of its growth and balance of payments success to gender wage discrimination.

The negative effect of higher female relative wages on demand might be counteracted on the leakages side if gender differences in savings and import propensities are large enough to stimulate domestic consumption. Although it is theoretically plausible that male and female saving and import propensities differ, there is as yet a dearth of empirical evidence to identify the size and direction of those differences. For example, only a few studies examine the relationship between gender equality and aggregate savings⁴ and none explore effects on import demand. If higher female wages did reduce aggregate saving and imports, the effects would have to be quite large to offset the contractionary effects of declines in I and X , an unlikely scenario in SIEs. As such, research suggests that greater gender wage equality is contractionary and gender conflictive in such economies (Blecker and Seguino 2002; Mitra-Khan and Mitra-Khan 2009; Seguino 2000, 2010).

Most SSA countries, however, fall into the category of LIAEs, where gender effects differ from those in SIEs. In LIAEs, women are concentrated in (unpaid) subsistence food production (for

⁴ Floro and Seguino (2002) offer some empirical evidence that in SIEs, women's marginal propensity to consume is higher than men's. Women employed in many SIEs' export industries tend to be young and unmarried, saving a large part of their earnings to send to families to educate brothers, or for dowries or both.

example, food crops such as indigenous fruit, vegetable, and staple food crops), and some off-farm waged labour. Despite their active role in the agricultural sector, women are disadvantaged due to cultural, socio-economic, and sociological factors, as exemplified by gender biases in asset ownership, land tenure systems, access to credit, education, and extension services (Oduro et al. 2011). In LIAEs, it is men who are likely to be employed in export sector, in particular cash crop production (Were and Kiringai 2003) and mineral extraction.

Doss (2002) notes that in agriculture, a strict division of labour no longer exists. Women increasingly engage in commercial production as waged workers in non-traditional agricultural exports (NTAEs). And more women workers are entering the mining industry. That said, food security in large part continues to depend on female labour while women comprise only a small share of workers in the export sector of most SSA countries.

Given this division of labour, what would be the effect of greater gender equality in SSA measured through wages? Although data is limited, we can make inferences, based on what we know about the structure of such economies. The net effect of higher female wages on investment and exports in SSA is likely to be weak, even if negative. That is because, on the investment side, the bulk of large-scale firms are in export-oriented extractive industries and infrastructure, which are male-dominated in employment. Moreover, given the structure of production in SSA, higher female wages in off-farm employment and greater access to credit might very well stimulate investment in on-farm production due to the effect on access to technologies and production inputs (Doss 2001).

With regard to the right-hand side of equation (1), in LIAEs, women in the labour force are more likely to be older and married with children than females in SIEs. Kiringai (2004) finds evidence for Kenya that women's consumption propensities exceed men's although detailed empirical work is needed to draw any firm conclusions that could inform theoretical models or computable general equilibrium (CGE) models. Insofar as we do find evidence of higher female marginal propensities to consume, there is the possibility that resource redistribution to women could have positive demand-side effects. Based on the empirical evidence available thus far, combined with what we know about gender segregation in employment and the structure of LIAEs, higher female wages will have a negligible contractionary effect on the macroeconomy in the short run and potentially an expansionary one.

Other measures of gender equality that have short-run effects may be more salient than wages in LIAEs. A significant body of evidence suggests that gender equality in access to inputs (credit, fertilizer, extension services, and land title) could raise on-farm productivity in a number of SSA economies (Udry et al. 1995; FAO 2011). For example, a study on Burkina Faso notes that fertilizer is more heavily applied to male plots, resulting in greater productivity than on female plots, after controlling for weather conditions and types and characteristics of plots (Udry 1996). Goldstein and Udry (2008) find that because of weaker property rights in Ghana, women do not fallow their land enough, leading to lower productivity. The implication is that equalization of inputs and land rights could raise yields on women's plots. Based primarily on micro-level studies in SSA, the FAO estimates that closing gender gaps in input use could feasibly increase production on land controlled by women by 20–30 per cent. This would lead to a 2.4–4.0 percentage point increase in agricultural output, with the potential to reduce the number of under-nourished by 12.0–17.0 per cent (FAO 2011).

To the extent that gender equality in inputs, credit, and land title raises food production, the balance of payments may benefit, due to reduced reliance on imported food goods. Additionally, society as a whole stands to benefit from greater food sufficiency. The data to assess both female

and male access to resources (especially agricultural credit) are simply not yet widely available, however. The data challenges of empirically testing theoretical models, then, have been a constraint on research in this area. This is especially so in SSA, where time-series data on female and male wages, assets, and credit are severely lacking.

3.2 The long run

Gendered macro models treat all gender wellbeing indicators as flexible in the long run. This implies that along with livelihood measures of gender inequality, capabilities variables are also incorporated into long-run growth models. The pathways by which livelihoods and capabilities indicators are hypothesized to affect the rate of economic growth vary by theoretical framework.⁵ A number of long-run growth analyses have adopted a neoclassical framework based on the Solow model. Assuming Say's Law (that is, that economies do not face demand-side constraints and thus problems of excess capacity and unemployment), the supply side determines the rate of economic growth in these models. In contrast, Keynesian/Kaleckian models allow for imbalances between potential output and demand.

Gendered neoclassical accounts emphasize the positive effects of gender equality in capabilities, such as education and health (but not wages or credit). The primary pathway is via effects on human capacities, although some consider the effect on investment. Heterodox models differ in that, in addition to human capacities, they pay attention to effects on physical capital accumulation, assessing the impact of livelihoods measures such as wages on long-run growth.

The effect of greater capabilities equality

There are several pathways by which capabilities equality can raise economy-wide productivity. The first is a direct effect on labour productivity. If innate abilities are similarly distributed between women and men, unequal educational investments in favour of boys lead to inefficiencies due to a selection distortion problem: Overinvestment in less qualified males and under-investment in more qualified females. This can lower economy-wide efficiency, implying that gender equality in educational investments can stimulate productivity and economic growth. Several studies provide empirical support for this hypothesis (Balioune-Lutz and McGillivray 2009; Klasen and Lamanna 2009). Klasen and Lamanna (2009) estimate that the cost of education gaps in terms of foregone gross domestic product (GDP) in SSA amount to 3.48 percentage points annually relative to East Asia over the period 1960–2000. The effects are both direct (on economy-wide productivity) and indirect (lower female relative productivity dampens business investment).

A second pathway by which greater educational equality can stimulate development and growth is via the impact on children's wellbeing. Whether due to greater female bargaining power within the household or the enhanced ability to provide better care for children, women's increased educational attainment (relative to men's and absolutely) has been found to produce a positive effect on children's survival, health, and education (Blumberg 1988; Doss 2013). One (indirect) pathway by which children's wellbeing may be enhanced is through the effect on fertility. As the opportunity cost of having children rises with more education, women's fertility rates decline, reducing the dependency ratio. This permits larger investments in children (Galor and Weil 1996).

⁵ Seguino (2010) develops a framework for comparing the implications of the main distinctions between theoretical approaches.

There is broad consensus in the literature that educational equality enhances growth and development, although the question of which educational measure is the most salient remains. That is not surprising since economic structure will influence the demand for more or less skilled labour. Balamoune-Lutz (2007), for example, finds that in SSA, gender gaps in literacy have a negative effect on growth, but gender gaps in secondary school enrolment rates do not. Although other measures of capabilities, such as women's absolute health status, have also been linked to children's wellbeing and cognitive development in micro-level studies (Agénor et al. 2010), there is little macro-level research that explores the impact of relative health inequalities.

The effect of gender equality in labour force participation and wages

Similar to selection distortion in educational investments, gender differences in labour force participation rates may reduce the economy-wide quality of the labour force. Two studies have empirically assessed the effect of gender gaps in labour force participation.

In empirical work on SSA using a Solow growth accounting framework, Bandara (2012) estimates that gender equality in effective labour (the combined effect of gender gaps in labour force participation rates and education) could raise output per worker in SSA between 0.3–0.5 percentage points annually for the period 1970–2010. Existing gender gaps in effective labour imply an annual cost of US\$60 billion in lost output for SSA, or roughly 10 per cent of total SSA GDP (in constant 2010 international US\$). Klasen and Lamanna (2009) also find that higher female/male labour force participation rates stimulate growth in developing countries. In addition to the effect on labour productivity, this effect may operate indirectly, by raising women's bargaining power within the household and increasing the share of household spending on children's wellbeing.

An important deterrent to greater gender equality in labour force participation rates is the burden of unpaid labour, predominantly born by women. Unpaid work includes activities such as caring for children, producing subsistence crops for household consumption, home maintenance, and home-based nursing care for the ill and the elderly. A ubiquitous finding is that women perform substantially more unpaid labour than men, although the gender gap in performance of this work varies across SSA (Blackden and Wodon 2006). Holding constant men's performance of unpaid labour, the reduction in time required for such tasks frees up time for women to spend in remunerative activities that can increase their bargaining power within the household, and can reduce child labour. In some cases, this can directly impact girls' education if they are relied on (more than boys) to assist in unpaid labour, as is often the case in many SSA countries. Such improvements can be induced via public investments in infrastructure that reduce the time women must allocate to unpaid care work (Fontana and Natali 2008). As women's relative capabilities, incomes, and assets increase, they experience greater bargaining power within the household, giving them more control over their fertility.

Long-run heterodox growth models evaluate the direct role of wages in influencing labour productivity growth via their effect on investment in physical capital. Taking the case of SIEs, the ability to hire women at low wages (relative to their productivity) can be a stimulus to investment and technological advancement, as noted above, via the effect on unit labour costs and profits. This implies that higher female wages have a negative effect on the growth of output, dampening productivity growth. But this is offset, at least in part, by the positive effect of higher female wages on human capital. The chain of causality is that higher relative wages improve women's bargaining power in the household with positive effects on investments in children's wellbeing and thus long-run economy-wide productivity growth. The net effect on

productivity growth in SIEs is thus an empirical question to be determined on a country-by-country basis.

The finding that gender educational equality is a stimulus to growth while wage equality is not may at first glance appear contradictory. Upon further examination, it is not. Greater educational equality is at least in part indicative of higher relative female labour productivity. Women tend to occupy the type of jobs in which they lack bargaining power to translate improvements in their productivity into higher wages. As a result, the gender gap in education narrows more than the gender wage gap. This issue turns on the impact of greater gender equality in education (and other measures of skill) on unit labour costs

$$ULC = w_F b$$

where ULC is unit labour costs, w_F is nominal female wages, and b is the labour coefficient (the inverse of labour productivity). Improvements in women's education relative to men's lower the labour coefficient and thus unit labour costs, but without necessarily leading to higher female wages. Gender discrimination (the gender gap between wages and productivity) can raise profits, lower prices, or both, with positive demand-side effects. Thus gender inequality can have a positive effect on growth, as long as it does not alter the overall *quality* of the labour force (Berik et al. 2009; Braunstein 2012). This is not an argument in favour of gender wage inequality. Rather, it highlights an underlying tension in the sources of growth in some countries. Reliance on gender wage discrimination to raise economy-wide living standards is contradictory in the sense that it is not compatible with intergroup inequality. Further, as noted above, it may not be a sustainable strategy in the long run, even if it does produce a short-run stimulus to growth.

The long-run growth effects of greater gender equality differ in LIAEs (including a number of SSA countries) as compared to SIEs. The dissimilarity turns on the effect of greater wage equality (and other opportunities such as credit, land, and inputs) in stimulating on-farm investment and thus raising productivity and agricultural yields. Here the effect of greater gender equality is likely to be positive, suggesting that the benefits of gender equality in livelihoods for growth are more unambiguously positive in these countries. This brief summary of the literature demonstrates advances in our knowledge of the effect of micro-level gender relations on macro-level outcomes, and in particular, the pathways by which equality may stimulate economic growth and potentially development, defined as broadly shared improvements in wellbeing.

That said, this research agenda is far from complete and its boundaries have not been definitively drawn. The plethora of microeconomic analyses that investigate the impact of gender inequality at the household level and in specific labour market contexts help to identify important potential macroeconomic relationships, but are not generalizable. Macroeconomic studies remain sparse due to limited availability of data except for a few widely used indicators such as education, life expectancy, literacy, and labour force participation. We will be able to say more about how gender affects macroeconomic outcomes and to more accurately quantify those effects with the expansion of gender-disaggregated data.

4 Macro-level policies and gender equality

One of the critical findings in the gender and macroeconomics literature is that of a two-way causality between gender and macro-level outcomes. Just as efforts to promote gender equality may have an effect on economic growth, macro-level policies in turn influence the distribution

of resources and wellbeing between women and men. That is, macroeconomic policies are rarely distributionally neutral. Apart from the distributional effects, the importance of understanding the gender impact of macro-level policies lies in the feedback effects to economic growth. Policies meant to stimulate growth or stabilization may fail to achieve their goals if they inadvertently undermine gender equality. This is particularly relevant to SSA where gender equality shows strong evidence of stimulating long-run growth and development.

A number of studies explore the effects of economic growth on measures of gender equality.⁶ It is, however, the specific policies implemented by governments that are gendered in their impact, not growth per se. More recently, studies have begun to evaluate the effects of specific policies. These include the effect of fiscal and monetary policies, as well as trade and investment liberalization. We review the major findings here, emphasizing results that are of particular relevance for SSA.

4.1 Fiscal policy

The public sector has a key role to play in creating the conditions for gender equality. Through its budget allocations, the state has the potential to redress inequalities and discrimination in the household in asset ownership,⁷ and in labour and credit markets. Various measures, including spending on education and training, can narrow gender gaps in access to health care, while targeted physical infrastructure expenditures can reduce women's care burden. To the extent that gender equality is a stimulus to growth, especially as it appears to be in SSA, it is 'affordable'. That is, by raising incomes, expenditures promoting gender equality can generate the revenue to cover the cost of the initial public expenditures.

Improved water and sanitation facilities, for example, decrease illness and time spent fetching water. Because caring for the ill and fetching water are considered female tasks, public expenditures on these could substantially reduce women's unpaid labour burden in SSA. Transportation improvements reduce the time women spend in marketing goods and expand access medical care. Decreases in unpaid labour burdens expand women's opportunities to perform remunerative work. This has benefits for children's wellbeing. A large body of evidence indicates that improvement in women's access to income results in more resources invested in children's health, education, and development. This is due in part to women's propensity to spend a larger share of their income on children than men's (Folbre 2002; Doss 2013). Improvements in mothers' health have been found to affect children's health in utero, with long-term positive effects on children's cognitive skills and thus productivity (Agénor et al. 2010).

Some studies estimate the effect of public sector investments on gender equality. Using data from Tanzanian time-use surveys, Fontana and Natali (2008) simulate the benefits of targeted public sector infrastructure investments that reduce time spent on unpaid care activities. They demonstrate that such investments, by reducing the time spent on fetching water, fuel, and other unpaid household maintenance activities, reduce the care burden, disproportionately raising the earnings potential of women relative to men. Seguino and Were (2014) provide empirical evidence of a positive effect of infrastructure investments on gender equality in employment rates, using a sample of 38 SSA economies for the period 1991–2010.

⁶ For a review of this literature, see Kabeer and Natali (2013).

⁷ In fact, such policies could face less resistance than directly redressing legal barriers to gender equality in asset ownership, such as laws and customs regulating land ownership rights.

These linkages imply that physical infrastructure investments to reduce women's care burden and improve their health have long-term economic benefits in the form of healthier, more educated and productive workforce, and can thereby stimulate economic growth. An added advantage is that they contribute to greater gender equality.

Public investment in agriculture (such as credit and extension services) could also reduce gender inequality by improving yields on plots farmed by women, simultaneously decreasing the reliance on imported food. Women's limited access to agricultural inputs is in part due to restrictions on the right to own land (Kevane 2004). As a result, women lack the collateral to access credit needed to purchase inputs. Women's share of small farmer credit in SSA, for example, is estimated to be ten per cent and for all agriculture, one per cent (FAO 2011). Targeting public sector spending to equalization of access to credit and agricultural inputs could have a profoundly positive effect on women's and children's wellbeing, and on overall agricultural output.

The challenge in SSA and elsewhere is to reframe thinking on public spending that could contribute to greater gender equality by recognizing the investment character of such expenditures. Such spending has a public goods quality because it produces spillover benefits to society as a whole, with a stream of returns accruing over many years. By raising labour productivity, such expenditures also raise incomes and thereby generate tax revenues with which to pay down the debt incurred to finance the original investment. In the past, we have merely considered such expenditures as consumption spending, without any feedback effects on labour productivity and thus economic growth.⁸

4.2 Monetary policy

A very new area of research is the impact of central bank policies on gender equality. These policies include inflation targeting (IT), exchange rate policies, capital controls, and asset reserve requirements. Properly targeted, these policy tools have the potential to promote gender equality. We discuss gender implications in the context of a changing monetary policy landscape.

The traditional focus of monetary policy had been stabilization of output (employment) and prices. With global financial liberalization, however, the emphasis has shifted to a concern with price stability. Consequently, IT became the dominant policy stance and the number of IT countries has been rising. Notwithstanding this trend, IT has many skeptics (Ball and Sheridan 2005). The suitability and effectiveness of the IT framework have been questioned for SSA, owing to the structural supply-side origins of inflation and imperfect monetary policy transmission mechanisms (Heintz and Ndikumana 2011; Misati et al. 2012; Were and Tiringo 2013). Additionally, although the economic growth record for Africa improved in the last decade, employment creation remains a pertinent developmental priority for the foreseeable future.

In addition to the development objectives of expanded output and employment that require strategies beyond the narrow focus on inflation, there is an embedded gender dimension. This should not be misconstrued to imply that price stability is not unimportant. If anything, high inflation is bound to disproportionately hurt women, especially with respect to the purchase of basic commodities, such as foodstuffs, on which women spend a significant portion of their

⁸ Although fiscal expenditures tend to receive more attention, taxation policies likewise have gender implications (Grown and Valodia 2010).

income. Overall inflation in SSA economies tends to be largely driven by food inflation. As noted, women play an important role in ensuring food security and thus price stability. Given the sources of inflationary pressures, targeted fiscal policy expenditures to relax supply-side bottlenecks are more precise tools than contractionary monetary policy, which addresses the inflation problem by reducing demand (Seguino and Were 2012).

Apart from the failure of IT to address the root causes of inflation in SSA, recent research demonstrates that contractionary monetary policy has gendered effects. The effects are hypothesized to work through interest rate and credit channels, resulting in the contraction of output and employment, both of which have disproportionate gender implications (Braunstein and Heintz 2008; Seguino and Heintz 2012).

Monetary policy also produces gender effects through the exchange rate channel, although here too, much more research is needed. Most African countries liberalized exchange rates as part of trade liberalization reforms although central banks still play a fundamental role in managing exchange rate movements. The exchange rate influences import and export dynamics, and as a result, can have far-reaching consequences at the household level. While depreciation promotes export demand, it can result in gender disparities in the ability to export, with negative consequences for gender equality in control of resources and bargaining power at the household level. Moreover, SSA economies rely heavily on imported intermediate and essential goods. Unfavourable exchange rates can raise the burden on consumers in the form of higher prices, or by creating unnecessary scarcity. Higher costs of essential goods like pharmaceuticals and medical equipment are likely to increase the care burden of women.

An alternative monetary policy framework that promotes gender equality is one in which the central bank would identify ‘real’ targets such as employment or output in strategic groups, sectors, or regions. One tool that could be used is for central banks to offer loan guarantees to private banks that extend loans in these areas. In agricultural economies in SSA, where women are subsistence farmers, small-scale agriculture is an obvious choice. The provision of loan guarantees is a good way to overcome the credit constraints women face, given restrictions on their ownership of land and thus lack of collateral. In this framework, the private sector would still provide the bulk of credit, but it would be characterized by low interest rates leveraged with government loan guarantees. The feedback effects of such a policy could be substantial, since higher agricultural yields can reduce the demand for food imports, relieving pressure on the balance of payments and exchange rate. Although research in this area is still in its early stages, we can conclude that monetary policy can usefully be conducted through a gender lens, that is, with an eye to understanding its differential effects on women and men.

4.3 Trade and investment policies

The impact of trade and investment liberalization policies on gender equality depends on the structure of the economy and, of course, the magnitude of the employment, price, and public sector revenue effects. With regard to structure, as we have noted, in SSA, trade continues to be dominated by minerals and agricultural commodity exports. That said, SSA’s participation in global value chains has expanded, mainly at lower ends of supply chain in the areas of textile and apparels, horticulture, and agribusiness. Similar to SIEs, these export-oriented sectors thrive on the availability of cheap labour, notably provided by women. Poor working conditions and low pay persist (Tallontire et al. 2005; Were 2011; Chan 2013), with challenges ranging from poor health and safety standards, inadequate leave entitlements, to sexual harassment, and wage discrimination.

Much of trade and investment gender research has focused on the impact on female employment and wages (Standing 1989; Berik et al. 2009; Papyrakis et al. 2012; Wamboye and Seguíno forthcoming). In general, evidence suggests a positive relationship between trade and investment liberalization, on the one hand, and female employment in export-oriented sectors, on the other. In the case of SSA, however, the record is more mixed. Trade liberalization has contributed to deindustrialization in female labour-intensive industries in some cases, as SSA goods have been forced to compete with lower cost Asian goods. The rise in Chinese investment in Africa has not substantially changed the manufacturing landscape as of yet (Carmody 2008; Wamboye and Seguíno forthcoming). Other measures of gender equality underscore the potential negative effects of trade and investment liberalization in SSA as well. Of particular note, Balamoune-Lutz (2007) finds that greater integration in world markets and growth lead to wider gender gaps in literacy rates in SSA.

A more generalized finding across developing countries is that trade and investment liberalization are also associated with increased downward pressure on wages, increased inequality, and widening discriminatory gender wage gaps (van Staveren et al. 2007; Berik et al. 2009; Seguíno 2007; Menon and van der Meulen Rodgers 2009). The cumulative evidence to date suggests that trade and investment liberalization have had contradictory effects on gender equality. Although in some cases increasing women's relative access to employment, the shift in macro-level policies results in problematic conditions of work, and does appear to provide a path to gender equality in livelihoods.

Two inferences can be drawn from the discussion on the effect of trade and investment policies on gender equality. First, the degree of gender inequality is a function not only of individual differences in human capital, but also of macro-level policies that interact with gender norms and stereotypes to produce unequal outcomes. Second, this underscores the importance of managing trade and investment in ways that are compatible with gender equality (Tallontire et al. 2005; Seguíno and Grown 2006).

5 Conclusion

A large body of research produced in the last two decades makes a strong theoretical and empirical case that gender is a macroeconomic variable. That is, gender relations at the microeconomic level produce macroeconomic effects that vary by country, structure of production, as well as the macroeconomic policy environment. As of yet, mainstream analyses attempting to identify the policies that will stimulate growth in SSA have yet to integrate the role of gender. This is problematic on several counts. First, some empirical accounts suggest gender effects on growth, development, and the balance of payments can be quite large. This suggests a missed growth opportunity and underscores the fact that there is adequate fiscal space to fund gender equality initiatives. Second, a failure to integrate gender into macroeconomic models and policy frameworks misses important economic dynamics taking place in African economies. Failure to account for them can lead to policies that are ineffective, or even harmful for the macroeconomy.

Having argued that gender matters in the macroeconomic world of theory and policy, the effects of gender equality can be contradictory, depending on whether initiatives raise labour productivity or the cost of labour. Further, there is much to learn about the size of the short- and long-run effects of gender equality. A significant issue for SSA is the role of gender equality in expanding agricultural output, and the effects of this on price stability, the import bill, and the

balance of payments. During the last decade (2000–10), net food imports into SSA rose 60 per cent (FAO 2011). This is a drain on foreign exchange that could otherwise be used to import capital- and skill-intensive goods that would raise productivity. Increasing food production and reducing food imports also has beneficial effects for monetary policy and exchange rate management.

It is not enough to engender growth models. Account also has to be taken of the feedback loops from macro-level policies to gender equality. Macroeconomic policies that worsen gender equality can undermine growth objectives if in fact gender equality is itself a stimulus to growth. The growing body of work that analyses the impact of fiscal, monetary, trade, and investment policies provides some guidance on the pathways by which gender relations are affected. Although more research is needed in this area, one clear area of focus is the beneficial gender effect of targeted public investments that can be sustainable, in light of the investment quality of such spending. Monetary policy tools, too, can be utilized in innovative ways, to overcome gender inequalities in asset ownership. A more challenging problem is how to ensure that trade and investment policies are gender equitable. In view of the changing global landscape, trade policies that ignore the gender-specific constraints in capabilities and competencies to trade are bound to be sub-optimal.

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