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in the Context of SDGs

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Abstract

This paper identifies a series of macro-level tools to create a supportive environment and the resources to promote SDGs related to gender equality. A key argument is that financing for gender equality can be self-sustaining because of the feedback effects from gender equality to economy-wide well-being. Among the tools related to targeted government spending are demand-stimulating macroeconomic policies to promote full employment and public investment. Two types of public investment are explored. *Physical infrastructure investment*, such as spending on clean water, sanitation, and health clinics, can reduce women's unpaid care burden. *Social infrastructure investment*, defined as investment in people's capabilities, refers to the fundamental social, intellectual, and emotional skills and health of individuals—or level of human development—a country relies on for its economy to function. Both types have a public goods quality in that they generate positive spillover effects on economy-wide productivity. Financing for gender equality in these areas is more properly seen as an investment that yields an income stream in the future, as a result of the beneficial development and growth effects. As a result, both physical and social infrastructure spending have the ability to create fiscal space. Additional sources of financing for gender equality are discussed, including taxation of the financial sector.

Monetary policy can also be harnessed to promote gender equality. A much wider range of policy tools are available to central banks than are now used. These include capital management techniques, asset-based reserve requirements, and loan guarantees in order to overcome women's lack of legal title to assets. The review of monetary policy tools here also suggests that emphasis on low inflation via the policy interest rate is problematic on two counts. First, higher interest rates dampen aggregate demand and thus employment. Second, the policy interest rate failures to address the underlying causes of inflationary pressures in many countries. Those pressures are often best dealt with through targeted fiscal policies in education, health care, and investment in strategic sectors, such as agriculture and infrastructure.

Government and central banks cannot adequately pursue these goals without changing their composition. The lens for identifying appropriate public investment projects and credit targets needs to be gendered and ethnically representative, underscoring the important role of affirmative action in private and public decision-making bodies.

Financing for Gender Equality in the Context of the SDGs

I. Introduction

The adoption of the United Nation’s Sustainable Development Goals (SDGs) in September 2015 reflects broad consensus that we face two key global challenges: a stark increase in inequality within and between countries and the negative impact of human activity on the earth’s carrying capacity (Atkinson, Piketty, and Saez 2011; UNDP 2013). Both undermine the potential for growth¹ and development to be sustainable and stable into the future. A related concern is how the global community and individual countries will finance the actions necessary to address both of these challenges.

In this background paper, I discuss methods for meeting the financing goals of a key SDG—gender equality—a goal whose impact, if achieved, will be to facilitate achievement of many of the remaining 16 SDGs. The centrality of gender equality for the achievement of the remaining SDGs does not imply this goal has only instrumental value. Though good for societies as a whole, substantive gender equality is most importantly a goal in its own right. At the center of the goal of human development is broadly shared well-being, which requires the creation of conditions where all people have the right and ability to realize their full human potential and benefit from rising living standards.

While there are as yet no clear estimates of the financial costs of gender equality SDG targets, identification of sources of financing is an important task.² That task will be shaped by the way that we conceptualize the costs as well as benefits of gender equality. A frequently overlooked attribute of investment in gender equality is that such spending can be self-financing when effects are evaluated over a medium- and long-run time horizon.

For example, public expenditures in physical infrastructure can reduce women’s care

¹ Economic growth is highly correlated with improvements in human development in the poorest of countries, and as such, is an appropriate goal. Growth strategies can be shaped, however, so as to limit negative ecological effects. The challenge for governments is to incentivize “green” growth, a path which could, for example, emphasize the expansion of services rather than material goods, once basic needs have been met. In richer countries, the correlation weakens, and shift in focus to goals of inequality reduction, full employment, improvements in the quality of work, and increased economic security are more fitting.

² Grown, Bahadur, Handbury, and Elson (2008) developed an approach to costing gender equality initiatives that could inform an estimation of gender costs of the SDGs.

burden and free up time to spend in paid work. Social expenditures that promote gender equality in education and health contribute to economy-wide improvements in productivity and income. Such expenditures are more appropriately characterized as *social infrastructure* spending than discretionary spending. That is because, by stimulating economy-wide improvements in living standards, such spending yields a stream of income (return on investment) in the future.

As such, this type of spending is an investment rather than a form of pure consumption. In the cases of both physical and social infrastructure spending, as incomes rise due to such public sector investments, more resources are generated at the state level to finance sustainability efforts. Investments to promote gender equality also generate resources to address other sustainability targets. In short, well-targeted efforts to promote gender equality can create fiscal space. These linkages are developed in more detail in the rest of this paper.

What types of gender inequality should be the proximate targets of policy? The answer to that question will differ by country, its stage of development, and the types and degree of gender inequality in three key domains—capabilities, livelihoods, and agency. *Capabilities* can be thought of as the prerequisites for adults to engage in production that provides a secure and adequate livelihood, typically measured with education and health variables. *Livelihoods* refers to measures such as wages, employment, access to credit, ownership of productive assets. The third domain—agency (or empowerment)—can be understood as the ability of individuals and the groups to which they belong to shape their environment. Thus gender equality in this domain would imply that women are equally *agentic* as men.³ Women’s share of managerial positions and trade union membership, and of leadership positions in cooperatives, businesses, and governing bodies are useful indicators in this domain.

These domains can be linked explicitly to targets identified in SDG 4 (educational equality and inclusion) and SDG 5 (gender equality and empowerment for women and girls). With regard to capabilities, SDG 4 advocates for the elimination of gender disparities in education and training and SDG 5 targets an end to violence, discrimination, and harmful

³ The term *agentic* comes from social cognition theory and implies that individuals and groups are both producers and well as products of their social systems—that agents both react to social norms but can in turn shape norms and the gender system.

practices such as early and forced marriage as well as reproductive health and rights. SDG 5 also includes targets that promote livelihoods, including promotion of shared responsibility for unpaid care work and equal rights to access to economic resources women's. Finally, women's agency is linked to the target of effective participation in decision-making in the economic and political realm in SDG 5.

For some time, the emphasis in the UN and other international bodies has been on equality of capabilities, especially education. The evidence shows that this is not sufficient to leverage change in other domains, especially in livelihoods. Macro-level policies coupled with gender job segregation have made it difficult for women in many countries to convert their greater productivity (related to higher educational attainment) into improved livelihoods, absolute and relative to men. Gender gaps in employment remain much wider than gender gaps in education, and there is evidence of increased gender job segregation globally, with women's share of jobs in the industrial sector declining over the last 20 years (IDRC 2013; Seguino 2016, forthcoming).

On the other hand, improvements in women's ability to secure a livelihood generates bargaining power to influence the distribution of resources at the household level and second, gender norms and stereotypes change as women's economic roles change. To achieve gender equality in livelihoods then, requires greater access to employment and productive resources, reduced job segregation, macro-policies that promote full employment, and reductions in women's disproportionate unpaid care burden. The quality of employment matters. Required is work that pays a living wage and provides economic security with limited volatility in income flows. Women's relatively greater access to and control over other assets such as land title, credit, and other inputs into the production process for women farmers is necessary to improve their relative well-being. Social protection to smooth income flows is also required.

It is also not enough to achieve improvements in women's economic empowerment, if the changes are to be sustainable. What happens to men is also important if we are to avoid backlash and resistance to changes in the gender distribution of resources and power. The narrowing of gender gaps in employment has occurred in the context of falling employment rates for men, heightening gender conflict (Seguino 2016). Thus it is not sufficient to ensure women's increased access to employment and productive assets. These gains must be made in a context in which men's well-being at a minimum is stable, and ideally, in which men also experience improvements in well-being, too. Thus, for the purposes of meeting other SDG 5

and other SDG targets, full employment is needed, the definition of which will differ, depending on a country's structure of production.⁴

How then might gender equality be advanced? Important institutional changes and innovations are necessary to work toward the gender equality goal. To be effective, these will need to be accompanied by appropriate and creative macroeconomic policies. The following sections explore a number of macro-level policies that can help to achieve the gender equality goals described here and articulated in the SDGs. They fall into several categories: 1) fiscal policy (including spending and tax policies to promote full employment and gender-aware public investment), 2) monetary policy, and 3) policies to increase fiscal space.

II. Macro-level policies achieve gender equality in the SDG framework

Macro-level policies refer to a broader set of instruments than we typically think of as part of the macroeconomist's tool kit. Since the 1980s, the toolkit has been considered to include a narrow range of fiscal, monetary, and exchange rate policy tools, and a limited role for the state. Macroeconomic objectives were narrower than in previous eras and typical goals included fiscal discipline, inflation targeting, and market liberalization. The lessons of the last three decades have taught us, however, that the state has a key role to play in facilitating a development strategy that promotes greater equality with attention to sustainability goals. Our challenge at this juncture lies in carefully defining that role, and in rethinking the relationship between the state and the market.

Two key generalizations can be made about the role of the state, particularly in light of the collective commitment to the SDGs. First, the state is the key institution responsible for articulating national development goals and objectives and the entity that conducts macroeconomic policy.⁵ At the center of government policymaking should be a detailed

⁴ Full employment may be defined as 2 – 3 percent unemployment in countries with well-developed labor markets. It could be defined quite differently in countries that are largely agricultural. There, the term might include a goal of women having equitable access to resources needed for productive purposes, such as credit and up-to-date technologies.

⁵ States differ in their capacity to articulate and advance national development goals and employ accompanying macroeconomic policies. A good example is the case of conflict and post-conflict countries. What can be expected of weak or collapsed states and what is the appropriate role of international organizations to promote progress on SDGs in that context? Also, in some countries, non-state actors have significant power—so much so that the state's capacity is severely circumscribed. What can be done to hold accountable non-state actors

strategy for achieving inclusive and sustainable macroeconomic outcomes. Second, an important component of the state's developmental role is to adopt incentives that encourage private investors to align their own profit goals with broadly shared well-being, including those articulated in the SDGs.

Role models such as South Korea, Taiwan, China, Brazil, and a number of other emerging economies have demonstrated that a broader set of tools is needed to promote growth, including an expanded role for the state in promoting development (Amsden 2001; Berg 2011; Stiglitz, Yifu, and Patel 2013; UN Women 2015). These countries are not, of course, perfect role models for achieving the SDGs. They lag to various degrees in the areas of gender, race, and class equality and environmental sustainability. Their experiences do, however, offer examples of the success application of alternative state-level tools to promote development and growth. An expanded toolkit to promote sustainable and equitable growth would include targeted public investment and credit allocation policies, full employment goals and tools, industrial and agricultural policies to promote structural changes, and capital management techniques. Tax policies that would generate sufficient resources to achieve these goals would also be required. Although strategies to manage foreign direct investment and trade in ways that promote a country's sustainable development goals would also be part of this toolkit, I focus primarily on fiscal, monetary, and tax policies in this paper. The reader should bear in mind that there is no one-size-fits-all macro policy toolkit to achieve the multifaceted goals of gender equality. To the extent possible, I identify the types of economies (based on structure of production and level of development) that are in a position to adopt such policies.

A. A gender-equitable inclusive macroeconomic framework

An inclusive macroeconomic framework is one that promotes broadly shared well-being, measured not only by GDP growth, but also by achievement of secure livelihoods, rising living standards, and expansion of capabilities. The specifics of a gender-equitable inclusive macroeconomic policy regime of necessity will be determined according to the structure of an economy. That said, we could outline the broad "real" (as compared to monetary) targets any

such as drug and warlords, and the transnational private sector? These questions are not answered here, but are important to investigate if SDGs are indeed to be achieved.

inclusive macroeconomic framework might want to achieve, based on identifying key social and economic problems to be addressed by policy. Four components, in addition to gender equality in capabilities, livelihoods, agency, and security, are key: 1) Full employment, 2) class/caste and racial/ethnic equality, 3) economic stability, 4) and the promotion of a green economy. These components are likely to be interlinked and to reinforce each other.

It bears reiterating that livelihoods, whether through paid work or self-employment, is the most immediate and important indicator of well-being. We know from many years of research that women's access to employment and livelihoods is central to improving their well-being and their bargaining power within the household. The principles of inclusive macroeconomic policy identified here also reflect the fact that growth based on inequality, as it had been in the previous two decades, is not sustainable. Needed, instead, are macro policies that make equity compatible with development and growth.

In the sections below, I discuss macro-level policies as distinct categories. In practice, policies need to be coordinated. This is especially true of fiscal and monetary policy, but it is also relevant with regard to trade and investment policies. I organize this discussion of macro-level policies in three parts: 1) government spending,⁶ 2) tax policy, and 3) monetary policies.

B. Government spending

Governments tax and borrow in order to pool societal resources and redistribute them to achieve particular goals. In the spirit of SDGs, such policies should be adopted and evaluated through a gender equity lens. For expositional purposes, I delineate several distinct categories of government expenditures, identifying the gender-relevant aspects of each—although they may in some cases overlap.

1. Public investment

Public investment has an important role to play in creating the conditions for gender equality. Public investment can be a tool to achieve full employment, promoting women's livelihoods while also reducing gender competition over scarce jobs (UN Women 2015). Public investment typically stimulates employment as businesses hire more workers to meet increased aggregate demand. When well targeted, public investment not only promotes

⁶ I use the term government spending rather than fiscal policy since the latter is typically associated with efforts to influence the level of aggregate demand, without necessarily the intention of altering the distribution of income and resources or influencing future growth patterns.

capabilities accumulation and reduces vulnerability; it also builds resilience (UNDP 2014). Moreover, targeted public investment can leverage or “crowd in” private investment by lowering production costs, further stimulating aggregate demand and employment growth. Because public investment can raise economy-wide productivity (Ranis and Stewart 2007; Roy and Heuty 2009; Bose, Haque, and Osborn 2007; Bayraktar and Moreno-Dodson 2010), it has two beneficial features. It creates fiscal space in the long run by stimulating income growth, expanding the taxable income base. Secondly, well-targeted investment can be anti-inflationary if it addresses supply bottlenecks that drive up prices.

Apart from these general effects of public investment, the state has the potential to redress inequalities and discrimination in the household, in asset ownership, and in labor markets through targeted budget allocations. To discuss the potential to address gender inequality, it is useful to divide public investment into two subcategories: *physical infrastructure investment* and *social infrastructure investment*.

a) *Physical infrastructure investment to promote gender equality and productivity growth*

Research identifies a strong link between physical infrastructure expenditures, women’s unpaid care burden, and the growth of potential output (Agénor, Canuto, and da Silva 2010). Targeted investments can reduce women’s unpaid labor burden, freeing up time to spend in remunerative labor activities, with benefits for gender equality and intrahousehold bargaining power (Chiappori and Meghir. 2014; Johnston, Stevano, Malapit, Hull, and Kadiyala 2015). Children’s well-being and economy-wide long-run productivity growth are also benefited.

For example, especially in low income developing countries, improved water and sanitation facilities decrease illness and time spent fetching water, a major factor adding to the unpaid labor burden in a number of developing countries (UN Women 2014). This is considered “female” work, and in regions where this burden is very high, rates of child labor are also higher, with negative effects on educational attainment (Edmonds and Pavcnik 2005). In economies at all levels of development, transportation improvements reduce the time women spend in marketing goods and in provisioning for households, and improve women’s ability to access services and labor markets.

Further, a large body of evidence indicates that women’s increased access to income results in more resources invested in children’s health, education, and development. This is due to women’s propensity to spend a larger share of their income than men do on children.

(Doss 2013). Improvements in mothers' health have been found to affect children's health with evidence of long-term positive effects on children's cognitive skills and thus productivity. 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 a healthier, more educated and productive workforce (Agénor 2008; Agénor, Canuto, and da Silva 2010; UN Women 2014).

Using data from Tanzanian time-use surveys, Fontana and Natali (2008) are able to simulate the benefits of targeted public sector infrastructure investments that reduce time spent on unpaid care activities for gender equality. They demonstrate that such investments, by reducing the time spent on fetching water, fuel, and other unpaid household maintenance activities, reduce the care burden and as a result, raise the earnings potential of both women and men. The results show that women benefit disproportionately from such investments. According to Fontana and Natali's simulations, the time released from unpaid work would raise women's income by 17.7 percent relative to the economy-wide average, and men's by 1.6 percent annually. Similarly, using a sample of 38 sub-Saharan African economies for the period 1991-2010, Seguino and Were (2014) found a positive effect of physical infrastructure investments on gender equality in employment rates.

Policymakers should be aware that reductions in the time required for care work as a result of infrastructure investment do not automatically translate into more employment. Chakraborty (2010) found that in India, infrastructure investment lessened the time stress in unpaid care work, but women's employment did not increase. She concludes that complementary employment policies are required along with infrastructure investment to ensure the substitution of market work for unpaid work. Physical infrastructure investment becomes more gender equalizing if, for instance, some of the following types of measures are incorporated: quotas for project jobs to enhance women's opportunities for employment, investments in skill training, gender-sensitive transportation, on-site care facilities, and jobs close to home.⁷ Moreover, sufficient employment demand in the broader economy is required

⁷ The World Bank (2010) conducted a review of their infrastructure projects from 1995 to 2009 to assess the extent to which gender targets were included to improve women's access to work. By 2009, a quarter of all projects (of a total 1246 projects reviewed) had met this goal. Among the ways that gender targets were met, some infrastructure projects set gender quotas to raise women's participation in project staff jobs, construction work, and membership in local oversight committees.

in order to absorb women as paid workers in response to reductions in time spent on unpaid care work.

The effects of public infrastructure investment on women's employment then vary and there is as yet no consensus on whether the effect on livelihoods is significant. There is greater consensus, however, that public infrastructure investments that reduce time spent on hauling water in developing countries has beneficial effects on children's education, and in Ghana, girls' school attendance (Koolwal and van der Walle 2010; Nauges and Strand 2013).

b) Social infrastructure investment

Investments in people's capabilities have a public goods quality with positive spillover effects on economy-wide productivity. Such investments are therefore more properly classified as social infrastructure spending rather than government current consumption or even simply human development expenditures. *Social infrastructure* refers to the fundamental social, intellectual, and emotional skills and health of individuals—or level of human development—a country relies on for its economy to function. Unlike physical infrastructure – such as bridges, roads, telecommunications systems—which tend to be publicly owned, social infrastructure is embodied in people, and enhanced via social spending by governments. The public goods nature of social infrastructure spending – that is, the positive externality economies experience in response to such spending—reflects the benefits that accrue to broader society as well as the individual. By expanding the productive base of the economy, such investments generate a flow of revenues into the future, made easier if increases in human productivity can be converted to higher incomes.

Social infrastructure is a relatively new and underdeveloped concept in economics. Much more empirical work is needed to identify its quantitative impact on long-run productivity growth.⁸ There is, however, already substantial evidence that social infrastructure spending that addresses key intergroup inequalities has sizeable beneficial economy-wide effects. Several studies provide evidence that closing the education gap between boys and girls has a positive effect on economic growth (Klasen and Lamanna 2009; Bandara 2015). According to Klasen and Lamanna (2009), per capita GDP growth rates in sub-Saharan Africa and

⁸ For example, in Northern Europe, the term is sometimes used to mean publicly financed childcare, elderly care services, and parental leave for women and men. This definition differs from that used here, where I focus on investments in people to improve their human capacities that have implications for labor productivity.

South Asia could increase by as much as one percentage point annually with gender equality in education. Bandara (2015) finds that total annual output losses due to gender gaps in effective labor (the combined effect of inequality in education and labor market productivity) could exceed \$60 billion for sub-Saharan Africa, rising to \$255 billion for the Africa region as a whole. The latter reflects the wider gaps in North Africa.

There are several explanations for the positive effect on growth of closing these gaps. Underinvestment in female education, female exclusion from jobs, and job segregation result in selection distortion,⁹ reducing the efficiency of such investments. In addition to the direct productivity effects of closing educational gaps, more education for women makes it easier for them to control their fertility, and spend time in the paid labor market (in economic terms, more education raises the opportunity cost of care work). An additional economy-wide effect is that with more education and lower fertility, there are typically more resources available to invest in each child and a positive effect on the quality of the future labor supply.

Social infrastructure spending can promote gender equality in employment in another important way. Because the gender division of labor results in women more likely to be employed in social service activities or the paid care sector of the economy, public spending in this area can narrow gender employment gaps. İlkaracan, Kim, and Kaya (2015) investigate the potential employment effects of a 20 billion Turkish lira expenditure on childcare centers and preschools versus public infrastructure and housing (the construction sector). They estimate that an expenditure of this magnitude in the construction sector would create a total of 290,000 new jobs while the same amount invested in childcare and preschool would generate 719,000 new jobs. Of the new jobs created via investments in the childcare and preschool sector, 73 percent would go to women, compared to roughly 6 percent of the new jobs created via expenditures on public infrastructure and housing construction.

Similarly, Antonopoulos, Kim, Masterson, and Zacharias (2011) present simulation results to show that, for the United States (US), investment in social service delivery sectors – early childhood development and home-based health care – creates twice as many jobs as the same level of expenditures on physical infrastructure (which creates jobs in construction and

⁹ Selection distortion (or bias) refers to the selection of individuals in such a way that randomization is not achieved. As a result, the sample is not representative of the population. Selection distortion operates via women's disproportionate exclusion from education and jobs, leading to an overrepresentation of men in those activities. If the distribution of women's and men's talents are equal, then selection bias results in the exclusion of qualified women from education and jobs, and the inclusion of underqualified men. The result is lower efficiency than in the absence of selection bias.

energy). The authors find that those jobs are more effective at reaching disadvantaged workers, and people from poor households with lower educational attainment. Thus, women are more likely to get these jobs and amongst women who are employed, more disadvantaged women benefit the most. In terms of efficiency per dollar spent, social infrastructure spending is likely to have a larger job multiplier and greater effect on gender employment gaps.

These findings are consistent with those obtained in studies of other geographic regions. Tabitha King (2014) studied the relationship between public spending and gendered urban employment in China for the period 1999-2009, and found that education spending is positively associated with economic growth, employment growth for both genders, and women's relative employment. In addition, Braunstein and Seguino (2012) find evidence that increases in social spending as a share of GDP had a positive effect on relative female employment in Latin America for the period 1990-2010.¹⁰

c) Public investments that stimulate job growth: Countercyclical, full employment, and other policies

Countercyclical and Full Employment Policies

The Great Depression taught us in no uncertain terms that capitalist economies are inherently unstable and indeed, irrationally erratic. Since that time, Keynesian demand-management policies had been routinely adopted by governments of a wide array of political leanings—until the 1970s. Those policies entailed “leaning against the wind.” During economic downturns, governments would increase spending on goods and services to soften the blow of unemployment and recession. Conversely, government spending would be cut during inflationary periods when the source of the problem was deemed to be business and household spending that exceeded the ability of the economy to produce. During the former periods, government budget deficits build up, and during the latter, surpluses amass, resulting in a relatively balanced national budget over the medium- or long-run.

For the achievement of gender equality and women's empowerment in the SDG goals, a return to these counter-cyclical policies is needed on a global scale. Industrialized economies typically are more able to adopt such policies as evidenced during the Great

¹⁰ They also found that higher minimum wages were associated with increased relative female relative employment over this same period of time.

Recession. That is, they tend to have greater fiscal space – the ability to borrow in order to deficit spend, due to credibility amongst lenders.¹¹

Poorer countries have less latitude to adopt countercyclical policies. In part, this is because the IMF has pushed for reductions in public sector spending via the conditionalities it imposes on those poor countries that must borrow from it rather than private capital markets during crises. In the recent crisis, for example, the IMF required budget reductions in a number of developing countries—Bosnia and Herzegovina, Republic of the Congo, Djibouti, Ghana, Latvia, and Mali, among others (Weisbrot, Ray, Johnston, Cordero, and Montecino 2009). The costs in terms of lost services and employment are painfully high amongst those who have the least savings and assets to weather economic storms, including women.

The parameters of fiscal space merit reconsideration, given the long-term effects of economic stagnation and unemployment. The economic costs of procyclical (contractionary) policies relate to the negative economy-wide effects resulting from persistent high unemployment rates. Of great concern is that long-term unemployment contributes to skills erosion. As a person's skills deteriorate due to lack of use, the probability of being hired in the future declines. Employers instead will prefer to hire younger workers whose skills have not atrophied from inactivity.

Long-term unemployment also has negative psychological effects and, as a result, harms worker productivity (Darity and Goldsmith 1996). Joblessness is linked to higher incidence of mental anxiety, depression, poorer cognitive performance, and loss of self-esteem—all affecting worker productivity (Flatau, Galea, and Petridis 2000). Women's unemployment has additional negative macroeconomic effects. As noted above, studies document the impact of a mother's poverty and depression on early childhood development (Agénor, Canuto, and da Silva 2010). At the macro level then, sustained unemployment leads to *hysteresis* (Ball 2014; Fatás and Summers 2015). Put differently, cyclical unemployment, if prolonged, can raise the structural rate of unemployment. This underscores that unemployment is not a transitory problem when it persists for so long that it reduces labor productivity.

¹¹ While many industrialized countries have subsequently adopted austerity plans in response to their deficits, this has not been due to inability to borrow (Greece is an exception to this).

The adverse consequences of prolonged unemployment highlight the link between full employment policies and longer-run growth and development. Government expenditures to stimulate demand and full employment can be at least partially if not fully self-financing if we consider a longer-run time horizon. Economists and policymakers have not typically thought about the gender effects of countercyclical or full employment policies—but they should. Evidence suggests that in many countries, women and racial/ethnic subordinate groups are at the back of the job queue during economic downturns, making strategies to promote full employment part of the toolkit to achieve gender equality (Seguino 2003; Couch and Fairlie 2010).¹²

Employer of Last Resort (ELR) Programs

ELR programs are another means to promote full employment, and at the same time, reduce gender conflict over scarce jobs. The ELR is a type of government-funded program that employs all of the jobless who are ready, willing, and able to work in a public sector project at a base wage. This program would eliminate unemployment by hiring any workers who apply, regardless of their work experience, skill background, race, age, or gender. ELR programs act as a buffer stock, and can be used to prevent deskilling and to strategically invest in infrastructure. During recessions, ELR employment rises as the private sector sheds workers. During economic expansions, ELR employment rolls decline as workers seek employment in the higher wage private sector (Tcherneva 2012). For all intents and purposes, ELRs are a subset of countercyclical policy tools.

Several countries have adopted ELR-type programs. Argentina adopted *Plan Jefes y Jefas de Hogares* in 2001 after the financial meltdown to deal with the subsequent economic fallout (UN Women 2015). The plan offers a job opportunity to unemployed heads of households in a community project. The program was federally funded but locally administered, and reduced unemployment by about 2.5 percentage points. This type of program has substantial direct and indirect gender effects, given the predisposition in many

¹² Some observers have claimed that men suffered disproportionately during the Great Recession. A more detailed analysis of the data shows, however, that in the US, those most likely to lose their jobs were men and women of color, and single mothers as compared to married men and women (Hartmann, Ashley, and Hayes 2010). It should be noted, however, that in some cases, women are forced to engage in distress sales of labor during crises to compensate for husbands' income loss due to unemployment. Typically, the types of jobs women gain during such crises are insecure and of low quality (Kabeer 2012).

countries to prefer males when jobs are scarce. For example, 38.9 percent of respondents to the World Values Survey agree that when jobs are scarce, men have more of a right to a job.¹³ An ELR program such as *Plan Jefes*, as it was known, cushions the effect of recessions on women's job losses relative to men's.

In 2005, the Indian government adopted the National Rural Employment Guarantee Act (NREGA). This act establishes a legal job guarantee for one hundred days of employment every year to adult members of any rural household willing to do public work (mainly unskilled) at the statutory minimum wage. The overall effect is to improve the incomes of rural people by providing primarily semi- or unskilled work opportunities, whether or not they are below the poverty line. This program differs from the *Plan Jefes* in Argentina, where only one member of a household was eligible for this work, thus creating gender competition for slots. In India, women's participation rate in the program is double their participation rate in the casual labor market, and in 2009-10 they comprised about 48 percent of those employed by this job guarantee scheme (Dutta, Murgai, Ravallion, and van de Walle 2012).

Government Spending as a Means to Address Inflationary Pressures

Government spending can also be usefully directed to targets that reduce inflationary pressures, especially in developing countries where the origins of the problem often lie with supply bottlenecks, not on the demand side. Targeted spending to reduce bottlenecks – on physical infrastructure, roads, communications, but also social infrastructure, such as spending on public health – can reduce production costs and therefore inflation. This is important for achieving the goal of full employment since, in many countries, central banks respond to inflationary pressures by raising policy interest rates, thereby reducing business investment and aggregate demand. The result is a slowdown in growth, worsened by the fact that the monetary policy tool is inadequate for addressing the real causes of inflation in developing countries. I return to the discussion of monetary policy in a later section.

Spatially-targeted Public Investment, Sectoral Change Policies, and Affirmative Action

¹³ This is the average across all countries in the sample of the 2010-2014 wave. Another 19.1 percent neither agree nor disagree. See www.worldvaluessurvey.com

Spatially-targeted public investment (e.g., to geographic areas where unemployment and poverty rates are high), sectoral policies, and affirmative action policies can be used to reach priority groups, such as women workers and farmers. These examples are not new; the key point is that government spending has distributional implications and requires associated policies to ensure equitable outcomes. Low-income agricultural economies, for example, can target public investments that enhance farmers' access to inputs and other resources, thereby raising agricultural productivity. Emerging evidence suggests that relaxing constraints faced by women farmers is particularly beneficial. Blackden, Canagarajah, Klasen and Lawson (2007) summarize research results for sub-Saharan Africa that find gender-equitable access to inputs, technology, extension services, and credit would increase women farmers' agricultural yields by 10–20 percent.¹⁴ Gender-sensitive agricultural investment can, as a result, increase domestic food production, lower food prices, and reduce reliance on imported food, thus relaxing the balance of payments constraint to growth (Seguino, 2010). The latter suggests the potential for a beneficial demand-side effect (import leakages are attenuated). Of course, public investments that raise agricultural productivity will be beneficial even if not targeted to closing gender gaps. But there is an additional productivity boost derived from targeting women insofar as this improves children's outcomes in the long run. These effects make such investments more affordable because they have an impact on long-run growth and thus a payback.

Affirmative action policies increase access to high quality jobs for women and other subordinate groups. This is especially important since data indicate wage gaps are closing very slowly, in large part due to women's exclusion from high-paid jobs. A good deal of research shows that once employed, gender and racial inequality is largely attributable to job segregation. Even in rapidly growing middle-income countries, which are experiencing industrial upgrading, we are observing evidence of defeminization of manufacturing employment (Tejani and Milberg 2010).

Increases in minimum wages, while they do not solve the problem of job segregation, can contribute to greater gender wage equality, given that women tend to be concentrated in the lowest wage jobs. As a result of the higher consumption rates of low-income groups,

¹⁴ An additional constraint women farmers face is access to credit due to restrictions on their right to own land, which could otherwise serve as collateral. But even this constraint can be overcome with appropriate monetary policy, a point I take up in more detail below.

higher minimum wages also stimulate aggregate demand and job growth, reducing women's unemployment and offsetting negative effects of higher female wages on female unemployment. Evidence from Latin America's decade of inequality reduction indicates that the gender employment gap was narrowed in the 2000s in part due to higher minimum wages in a number of countries (Braunstein and Seguino 2012). Because the employment data are broad, they do not allow us to assess the quality of employment. Braunstein and Seguino (2012) provide some evidence of job quality, however, noting that female/male informal sector employment rates fell in the 2000s as compared to the 1990s in all but a few countries in Latin America.

There is evidence of economy-wide benefits of closing employment gaps with policies such as affirmative action (Elborogh-Woytek, Newiak, Kochhar, Fabrizio, Kpodar, Wingender, Clements, and Schwartz 2013; Cuberes and Teignier-Baqué 2015). Cuberes and Teignier-Baqué (2015), in a simulation of the effects of gender gaps in entrepreneurship and labor force participation, find that both negatively affect income and aggregate productivity by reducing entrepreneurs' average talent. Specifically, they find that gender gaps cause an average income loss of 15 percent in the OECD, 40 percent of which is due to entrepreneurship gaps.

2. Strategies and tools for prioritizing public investments

Gender-responsive budgeting (GRB) is a tool to promote gender equality by assessing the effect of government revenue and expenditure policies on both women and men (Budlender and Hewitt 2003). We still have work to do in thinking through how to prioritize and sequence budgeting recommendations that contribute to greater gender equality. That said, gender budgeting processes should have a clear sense of their priorities. To give an example, for a number of sub-Saharan African countries, the major constraints on gender equality are attributable to women's unpaid care burden and lack of resources to improve their agricultural productivity. In that environment, it makes sense to prioritize the several goals: public investments in electricity, clean water, rural health clinics, and roads to reduce women's care burden; expansion of credit to small farmers, especially women, using government loan guarantees to overcome lack of collateral; and the implementation of quotas for women's representation in relevant bodies (such as have been adopted in Rwanda and Uganda) to help to ensure that public investment priorities reflect women's needs.

In other contexts, such as those where gender disparities in education are minimal but unemployment gaps between men and women are very large (e.g., the Caribbean region) the focus would be on employment generation in general, as well as specific policies to promote gender equality in access to paid work and in sharing the care burden.

C. Tax Policy

Two aspects of tax policy are relevant for redressing gender gaps identified in the SDGs – the *distributional impact* and the overall *level of tax revenues*. The *distributional impact* (specifically, the gender incidence) of taxation includes both direct (for example, personal income and corporate taxes) and implicit taxes (such as value-added, luxury, and fuel taxes). Grown and Valodia (2010) published an excellent and detailed analysis of gender effects of taxation and the reader is referred to that volume for approaches to such analysis.

It is useful to note that tax inequality may be direct (women and men are explicitly taxed at different rates) but the more frequent scenario is that gender bias is indirect and implicit, related to men’s and women’s different economic roles and norms. For example, insofar as women are the primary caretakers of families, taxes imposed on the consumption of basic goods will weigh more heavily on women. An example of gender-equalizing indirect taxation is South Africa, where basic food items and paraffin are zero-rated (there are no taxes on these items) in contrast to high taxes on alcohol and tobacco (Casale 2012). This study is an excellent example of a methodology for modeling gender effects of indirect taxation.

Tax codes may also reflect bias in the taxation of assets. Exemptions for mortgage interest payments, for instance, or dividend payments on stocks disproportionately benefit men. With regard to direct income taxes, the gender impact depends on the effect of joint or individual filing. Joint filing may lead to higher marginal tax rates on women’s income, even though they earn less than men, thus discouraging their labor force participation. Examining tax codes with a gender equity lens, then, can provide the foundation for tax code reforms that are gender equalizing. Rather than a one-size-fits-all tax policy approach, country-by-country analysis is required.

The *level of taxes* supports the ability of governments to reallocate pooled resources in ways to promote gender equality goals as outlined above. I will focus most of the discussion on this topic—that is, on sources of funding as a means to finance gender equality. Estimates

of the cost of the financing the SDGs vary widely, with low estimates in the range of \$1.0 - \$1.5 trillion a year (CESR 2014; UN DESA 2015). As noted, there are, as yet, no clear estimates of the financial costs of gender equality SDG targets. Of the estimates provided to date of the cost of SDGs, it is also not clear whether the savings generated through the positive feedback loops of reaching gender-related SDG 4 and 5 targets have been factored in.

For the moment, let me simply say that some expenditures are actually investments. That is, some expenditures increase output and incomes (e.g., early childhood education, gender equality in education and employment that stimulate growth). Through taxation, the increased income yields a payback for many years into the future, such that these expenditures at least partially if not fully eventually pay for themselves.

A challenge then is to identify appropriate sources and levels of taxation as one of the means to generate the financial resources for gender-equalizing public investment. Reflections on the potential for increased taxation as a revenue source to fund public investments are often conveyed with a sense of pessimism due to perceptions of scarcity. Scarcity, however, is in good part a social and political construction, based on years of globalization and neoliberal macroeconomic policies that have led to a decline in tax rates on the wealthiest and on capital. In many countries, the progressivity of taxation has declined, leading to budget cuts and/or higher tax rates on lower income groups. This in part is due to the increased mobility of capital, both financial and physical, which has resulted in their increased bargaining power vis-à-vis workers and governments.

The impact has been a decline in tax rates on capital. Decreases have been substantial. Average global corporate income tax rates (direct and indirect) have fallen from 38.0 percent in 1993 to 24.9 percent in 2010 (KPMG 2010).¹⁵ As Rodrik (1997) has noted, this has meant that the immobile factor of production—labor—increasingly bears the tax burden. This, coupled with the declining wage share of income of national income has led to downward pressure on public spending, creating a fiscal squeeze. This squeeze on revenues has significant negative implications for the ability of countries to fund policies and programs that promote gender equity.

¹⁵ These are statutory rates, or the base rate applied on all profits. Tax adjustments may be applied such that the effective tax rate differs from (and is lower than) the statutory rate. Taking the US as an example, although the statutory tax rate is 39.1 percent, the effective tax rate after deductions is 24.1 percent (KPMG 2010).

Macro-level policies that manage capital flows and foreign direct investment can reduce the “threat effect” of capital flight or firm relocation, permitting higher rates of taxation. This will offset revenue losses from tax holidays and other tax favors governments have granted in order to attract foreign direct investment. This discussion highlights that the most significant challenges governments face in collecting taxes from corporations and the wealthy are associated with globalization of financial flows. Estimates of the value of tax revenue losses due to corporate tax avoidance (resulting from, for example, transfer pricing and capital flight) is estimated to be in the range of \$217 - \$692 billion annually (CESR 2014). These challenges operate in an environment in which international governmental cooperation is institutionally lagging. The lag can in part be explained by governmental tax competition to attract much needed investment. However, the SDGs pose a resource challenge that necessitates a shift to greater cooperation.

Two other tax proposals have emerged to increase revenues collected from the financial sector – a financial transactions tax (FTT) and a currency transactions tax (CTT). FTTs are simply taxes imposed on the purchase and sale of financial securities. Taxes on financial transactions are not new. For example, the US imposed a stock transactions tax from 1914 to 1965 and this type of tax is currently about to be resuscitated in Europe. France adopted an FTT in 2012, and although the details are not yet finalized, 11 European countries have agreed to tax equities and some derivatives at rate of 0.1 percent with an annual predicted yield of \$100 billion¹⁶ (Burman, Gale, Gault, Kim, Nunns, and Rosenthal 2015). The CESR (2014) estimates the resource yield from a FTT across major financial sectors to vary from \$70 to \$661 billion a year.

The CTT is a tax on currency exchanges. The foreign exchange market is the largest market in the world, with an estimated \$5 trillion of foreign exchange traded per day. Only a small percentage of currency exchanges are to finance international trade. Exchange rate speculation accounts for the overwhelming bulk of global currency market trading (UNCTAD 2010; Bank of International Settlements 2013). Tax rates proposed on CTTs are similar in magnitude to those on FTTs, and estimates of revenue generation vary as widely.

¹⁶ A number of other countries have FTTs, typically on stocks, including Australia, China, India, Italy, South Korea and the United Kingdom. Most rates are in the range of 0.1 percent to 0.3 percent but are as high as 0.6 percent in Argentina (Burman, L. Gale, Gault, Kim, Nunns, and Rosenthal 2015).

The speculative character of the bulk of financial and currency transactions creates several macro-level problems. First, such transactions tend to be focused on short-term gains rather than long-term productive investment. Second, speculative activity has harmful destabilizing effects on the real economy, contributing to volatility, financial crisis and, as a result, crises in the real economy in terms of lost output, unemployment, and economic insecurity that weighs most heavily on households with low incomes and few assets.¹⁷

A second channel by which trading in financial instruments and currency produces social costs is the higher level of foreign exchange reserves countries have been forced to hold to self-insure against speculative attacks on their currency. According to Rodrik (2006), the opportunity cost of those reserves is roughly one percent of GDP. Any analysis of the costs and benefits of such taxes then would have to factor in the cost of reserves, as well as the impacts on volatility and crisis on households, especially those with few assets to smooth income.

Some have been skeptical that countries would agree to FTTs or CTTs. Since the 2008 Great Recession, sentiments have changed, however. The significant taxpayer resources devoted to financial sector bailouts have led to heightened sentiment that this sector is not paying its fair share of taxes. The rising share of rentier income in recent years, contributing as it does to global inequality and economic instability with substantial costs in terms of human development, make these taxes an appropriate source of revenue.

FTTs and CTTs would offer a disincentive to engage in short-term speculative transactions. Such a low tax may not quell speculative cross-border flows of money, however, suggesting that this option should be adopted in conjunction with capital management techniques (Grabel 2003). Rich countries would generate the bulk of the tax revenues, and more generally, the taxes would be highly progressive, and in essence, act as a sales tax.

Some have argued that because the CTT is focused on currency exchanges, it would benefit from being universal and uniform, with rates equalized across all markets. This implies that a multilateral approach to adoption of CTTs would be needed. The argument goes that, were it imposed unilaterally by one country, there is a danger that that country's foreign exchange market would simply move offshore (Palley 2003).¹⁸ Jetin (2003) disagrees, and

¹⁷ These include the Mexican crisis in 1994, the Asian financial crisis of 1997-98, with contagion effects on Russia (1998) and Brazil (1999) as well as crises in Turkey (2000) and Argentina (2001).

¹⁸ The case of Sweden is often cited as evidence of the inadvisability of unilateral adoption of a CTT.

argues that a wide variety of regulations exist that can overcome the problem of tax avoidance.

The question also arises as to how the revenue from a multilateral tax should be distributed. This is a concern since financial activity tends to concentrate in certain developed country locations such as New York and London. Those financial centers will have greater capacity to raise revenue with a CTT than others. A multinational agreement on how to apportion these revenues would be required, if they were to be allocated to respond to global development challenges such as those embodied in the SDGs. In earlier debates on this topic in the 1980s and 1990s, a variety of proposals for how to administer and distribute the proceeds of a CTT were advanced (Griffith-Jones 1996), and the UN/UNDP was identified as the entity that could create a body to allocate such revenues.¹⁹ Were there traction for this idea today, a portion of such revenues could be earmarked for investments that promote global progress on gender equality.²⁰

As is by now clear, the design of FTTs and CTTs continues to be debated. A first step in adopting such taxes is to reach sufficient global consensus that they are macroeconomically salutary and, from a justice standpoint, lead to a more fair sharing of tax burdens in a way that contributes to equity. An attractive feature of these taxes is that financial and currency speculators can avoid the tax by reducing their transactions, a response that would have socially beneficial effects on families, especially low- and middle-income families, as well as women. Indeed, these taxes are similar to pollution taxes in the sense that they discourage a behavior that can have negative social effects whose cost is not captured in the existing cost of trading, and in any case, is not fully born by trading parties.

III. A Rethinking of Fiscal Space: The Investment Character of Expenditures Geared Towards Achieving Gender Equality

As the discussion in the previous section underlines, physical and social infrastructure expenditures could help governments finance development for the future by generating

¹⁹ For more on earlier discussions on FTTs and CTTs, see Huq, Kaul, and Langmore (1996) and Weaver, Dodd, and Baker (2003).

²⁰ Gaining the political traction to impose FTTs and CTTs and related taxes is assisted greatly by clearly linking the taxes to expenditures on a social/economic need. As an example, recently, US presidential candidate Bernie Sanders began his campaign by addressing high levels of student indebtedness, advancing a well-received proposal for free college education to be funded by a financial transactions tax.

increased productive capacity. This potential is more generally acknowledged with regard to physical infrastructure investments. To date, little attention has been given to the ability of social infrastructure spending to create fiscal space by raising the productive capacity of the economy.²¹ This may be due to the fact that analysts mistakenly categorize such spending to be for consumption and therefore discretionary, without any feedback effects on labor productivity and thus economic growth.

It may be more immediately clear to the reader that spending on *physical infrastructure* has a public goods quality because it produces spillover benefits to society as a whole, with the stream of returns accruing over many years. More concretely, there is ample evidence that improvements in physical infrastructure “crowd in” private investment by lowering business (Seguino 2012). Less clearly understood is that some forms of social spending are not only for social welfare or social protection but also improve *social infrastructure*. This is because, by raising labor productivity, such expenditures raise incomes, generating tax revenues with which to pay down the debt incurred to finance the original investment. Just as with physical infrastructure, social infrastructure improvements lower the costs of doing business by raising productivity.

Under current fiscal discipline rules, many countries are assumed to lack sufficient fiscal space to undertake public investment. In particular, the degree of space is circumscribed by limits placed on a country’s public debt relative to GDP. The current approach to establishing debt ceilings defines fiscal sustainability for the short term, an approach that ignores the interaction between fiscal policy and growth over the longer term. This leads to an underestimation of the long-term payback to fiscal sustainability of public investment that could be debt-financed. Relatedly, current guidelines for assessing fiscal space and sustainability ignore *what* the fiscal space is used for. Most budgets classify current and capital budgets separately but this distinction is not made when evaluating fiscal deficits. The result is restrictive fiscal targets, and this has led to a decline in public investment/GDP ratios in many countries (Roy, Heuty, and Letouzé 2009).

²¹ An example of in-depth research by James Heckman on one type of social infrastructure spending—early childhood education—can serve as a model. His results show that investments in children during sensitive periods in their early years have life-long productivity effects. Heckman and Masterov (2007) found, for example, that one early childhood education program yielded a 4 percent rate of return for the child and a 12 percent rate of return for society at large.

The challenge is for governments to reframe their thinking on public expenditures by recognizing the investment character of such expenditures.²² Some of the benefits are more immediate, but many are evident only in the longer run.²³ The timeframe for generating measurable returns to this type of spending (and thus in many cases borrowing) may be as long as five to 10 years. By that time, appropriate public investments will have begun to expand the productive base of the economy, generating (taxable) incomes with which to pay down the debt. Such investments then are both fiscally sound and sustainable. Key here is that gender-responsive investment itself *creates* fiscal space by adding to the productive base of the economy (Seguino, Berik, and Rodgers 2010). Even in the shorter run, investments in physical infrastructure have been shown to “crowd in” private investment by directly reducing the costs of doing business (Calderón and Servén 2004; Agénor 2008; Bose, Haque, and Osborn 2007). The evidence shows that better roads, better communications systems, immunization programs, and education all matter for the bottom line.

The task then is to develop alternative criteria for determining the appropriate fiscally-sustainable level of public investment that takes into account the medium- and long-run economic benefits of such expenditures. Developing alternative criteria is not enough. Expansion of fiscal space by reconceptualizing the investment character of public expenditures will also require lending institutions to accept these new criteria.²⁴ In regards to gender equality, as noted previously, several studies demonstrate significant and substantial positive growth effects of gender equality in education (Klasen and Lammana 2009; Elborough-Woytek, K., M. Newiak, K. Kochhar, S. Fabrizio, K. Kpodar, P. Wingender, B. Clements, and G. Schwartz 2013; Bandara 2015; Cuberes and Teignier-Baqué 2015;

²² It also requires a reformulation of the concept of fiscal space in powerful international organizations such as the IMF. Elson and Warnecke (2011) note that “fiscal discipline” is sometimes enforced through conditionalities imposed by the IMF in order for countries to access the Poverty Reduction and Growth Facility (PRGF) and have argued that such conditionalities limit fiscal space by failing to account for supply-side effects of public investments.

²³ For a full treatment of this, modeled as an intertemporal budget constraint, see Rodriguez (2006) and Seguino (2012).

²⁴ States that cannot resist external pressure to undertake fiscal austerity will have to rely more heavily on resource mobilization through taxes. This is inadequate, however, since these are also the states that lack resources and administrative capacity to expand tax revenue collection and enforcement. Sympathetic international organizations will need to exert significant effort to change working definitions in a variety of institutions—IFIs as well as the international banking sector in general. Poor countries cannot do this alone.

McKinsey and Company 2015). To effectively make the rigorous case for the ability of expenditures that promote gender equality in other domains (e.g., spending on health and other care expenditures) to expand medium- and long-run fiscal space will require more focused empirical research. Funding targeted research on the payback of gender equality investments is pivotal to expanding the discourse and consensus on fiscal space.

IV. Monetary Policy to Promote Sustainability and Gender Equality

A. Inflation targeting

Central banks have the potential to play an important role in promoting gender equality through their ability to influence credit availability. This can stimulate job growth and increase access to productive assets for women entrepreneurs and farmers. Central bank tools to reduce destabilizing cross-border capital movements can limit macroeconomic volatility and help to avoid economic crises that undermine the goal of secure livelihoods. Despite this potential, over the past two decades, central banks have narrowed the focus of their policy interventions to almost exclusively emphasize low inflation. At the same time, and perhaps because of their more limited monetary policy goals, they have also restricted their use of monetary policy tools that could help to achieve gender equality and other SDGs.

During this time, inflation targeting (*IT*) has gradually become the dominant monetary policy prescription for developing and developed countries alike. *IT* focuses on maintaining a low level of inflation, often in the single digits, to the exclusion of other important objectives such as employment generation, investment promotion, or poverty reduction. *IT* central banks adopt a single policy tool, the policy interest rate. As inflation rates approach the target set by the central bank, the policy rate is raised, and this puts upward pressure on commercial lending rates that reduce business spending and as a result, contribute to economic slowdown and higher unemployment. The effect of *IT* policies then is to reduce aggregate demand as the means to address inflationary pressures. This focus, however, has several deleterious effects.

First, *IT* misses the dominant sources of inflation in many countries, which are often related to supply-side pressures – for example, low productivity due to ill health and lack of education, HIV/AIDS and other public health crises, agricultural shocks, energy costs, and poor infrastructure. Second, *IT* is deflationary—that is, it leads to slower GDP and

employment growth and dampens private investment. Because it also slows growth, tax revenues fall, making it even more difficult to finance growth-stimulating public investments in physical and social infrastructure. Third, *IT* contributes to growing inequality. As inflation falls and nominal interest rates increase, the real rate of return on financial investments rises. Evidence indicates that rentier income (income derived from wealth holdings as a share of national incomes) has been rising since the 1980s (Epstein, Grabel and Jomo 2004). This produces both a demand-side problem (aggregate demand falls due to the lower marginal propensity to consume of the wealthy), and it squeezes the incomes and thus consumption of lower income groups as well as their ability to invest in productivity-enhancing expenditures such as on their health and their children's education. Finally, *IT* policies, by raising interest rates, attract capital inflows due to the higher rate of return on financial assets, leading to currency appreciation and downward pressure on exports, growth, and jobs.

Adherents to *IT* argue that while the short-term effects are painful, inflation is worse. This view is based on the premise that workers, observing price increases, accentuate their demands for higher pay, triggering an inflationary spiral. Inflation targeting is meant to harness inflationary expectations and avoid such a spiral. *IT* adherents theorize low inflation will stimulate investment and output growth in the medium- to long-term. Thus, it is assumed that unemployment costs as a result of higher interest rates and slower growth are only temporary.

With more than 25 years of inflation targeting experience globally, enough evidence has accumulated to evaluate the effects of this policy stance. Some research shows that countries that have adopted *IT* have experienced reductions in inflation (Mishkin and Schmidt-Hebbel 2007). Of course, inflation itself is not the end goal; employment, growth, and development are. There, the record suggests *IT* has not achieved its goals.

A number of studies indicate that *IT* central banks do not reduce inflation at any lower cost than other countries' central banks in terms of job and output losses (Bernanke, Lauback, Mishkin, and Posen 1999; Ball and Sheridan 2005; Epstein and Yeldan 2009). Moreover, there is growing evidence that inflation targeting increases inequality in job access, with disparate effects by race and gender. Unemployment triggered by contractionary monetary policy has been found to lead to disproportionate layoffs among blacks in the US relative to whites, and differentially affects women in some developing countries as well as in the US (Rodgers 2008; Braunstein and Heintz 2008; Seguino and Heintz, 2012).

This is not to suggest that inflation should be ignored. Rather, the question is what the appropriate target should be. A common argument from *IT* adherents is that in order to prevent the harmful effects of inflation on long-rung growth, inflation should be in the low single digits. Research on the relationship between inflation and growth shows, however, that much higher levels of inflation are consistent with growth.

An early study by World Bank economist Michael Bruno (1995) found that growth increased as inflation rose up to 15 – 20 percent range in a sample of 127 countries. A subsequent paper co-authored by Bruno and William Easterly (1998) yielded empirical evidence that growth rates only declined when inflation exceeded 40 percent.

More recent studies find that the turning point at which inflation harms growth is much higher than the inflation targets in most developing countries. Pollin and Zhu (2006), for example, found that an inflation rate up to 15 – 18 percent is associated with moderate growth gains, after which growth declines. Anwar and Islam (2011) explore the inflation-growth trade-off for developing economies and obtain similar ranges of acceptable inflation rates that are growth-stimulating rather than growth-inhibiting. According to another study, the threshold is 11 – 12 percent for developing economies (Khan and Senhadji 2001). These rates are substantially different than the inflation targets set in a number of developing countries, which frequently lie between 3 – 6 percent (Epstein and Yeldan 2009). By raising the target inflation rate, central banks could allow real interest rates to fall, thus stimulating output and growth, and generating revenues to fund infrastructure spending and employment growth. It is worth reiterating that monetary policy has not typically been seen as a means to promote gender equality. Monetary policy, however, is not gender-neutral. The monetary policy tool rightfully should be part of the toolkit of any government that desires to meet the gender equality goals in the SDGs.

Clearly, such an approach would require central banks to expand beyond an exclusive focus on inflation and to articulate additional targets in addition to a (higher) inflation target. One approach that is particularly useful for promoting gender equality is what might be called the “real” targeting approach to monetary policy. These targets should be linked to the real economy (rather than simply monetary targets) and be clear, transparent, and easily interpreted so as to signal consistent policy to economic actors. In this approach, central banks would adopt country-appropriate targets such as employment growth, gender equality in employment, improved incomes for women farmers, investment promotion, and structural

change, subject to an inflation constraint (Epstein 2007). The shift in policy framework would require the central bank to design new tools and to rediscover old tools used by developed economies as well as East Asian economies. The real targeting approach might also be complemented by other policies, such as capital management techniques to deal with possible capital flight (discussed in more detail below).

B. Alternative central bank tools

The implicit assumption in the development and use of new tools is that there are economy-wide benefits to discretionary policy interventions, and that decentralized private markets can and do generate sub-optimal outcomes which can be improved upon. A tool central banks could use to meet their now multiple targets in addition to the short-term interest rate is asset-based reserve requirements (ARRs).²⁵ ARR would require private banks to hold a certain proportion of their loans in designated high-priority areas or else hold the same proportion of their total assets in non-interest bearing reserve accounts. ARR can be especially useful when fiscal policy is constrained by budget constraints. This system would incentivize but not require banks to lend in priority areas, given that they would incur a cost of holding reserves in reserve accounts that do not pay interest. This is a flexible method for directing credit to priority areas. Private banks would still be responsible for determining the creditworthiness of borrowers and thus retain a great deal of autonomy in lending practices.

The ability to qualify as creditworthy is a major roadblock for women borrowers, such as farmers, or for small- and medium-sized firms. Thus, even with the use of ARR, governments must adopt additional tools to expand access to credit for women entrepreneurs and farmers. One approach is for the central bank to offer loan guarantees for targeted groups. Again, the private sector would provide the bulk of credit, but it would be characterized by low interest rates leveraged with government loan guarantees. Governments would guarantee a certain percentage of loans extended to priority areas, thereby reducing a bank's risk exposure and lowering the cost of lending to borrowers. These loan guarantees substitute for collateral, leveraging access to credit and potentially bringing informal sector businesses into the formal sector. Credit could also be directed to large-scale businesses that

²⁵ Pollin, Epstein, Heintz, and Ndikumana (2006) provide a detailed example of the application of this tool in the context of South Africa's need to generate substantial employment growth.

can demonstrate their ability to promote significant increases in employment relative to their total spending.

These are neither new nor radical approaches. At a time when economists were seeking to explain the rapid growth of East Asian economies, Alice Amsden (2001) identified the importance of central bank mechanisms that promote medium- and long-term investment in late industrializing countries, supported by central bank policy tools to achieve this goal. Credit allocation policies were extensively adopted, and included selective credit targeted to strategic sectors and support for specialized credit institutions to meet diverse credit needs. The central bank's role in enabling long-term productive investment, coupled with targeting subsidized credit to strategic sectors, is credited with the rapid growth of manufacturing and overall economic growth in these economies. This occurred during a period of time in which central banks worked with governments to promote economic development. That is, fiscal and monetary policies were coordinated.

Epstein (2015) describes policies adopted in recent years by developing country central banks that have expanded focus beyond inflation to economic development and employment growth, both key to promoting gender equality. The Central Bank of Bangladesh, for example, has developed policies to provide subsidized credit to small business, improve renewable energy use in agriculture, and increase assets for small farmers. In 2012, Argentina's parliament approved a new charter for the central bank that allows it to provide funds for domestic banks and other institutions involved in long-term financing of productive investment. This approach strongly mirrors not only that of late industrializers but also of the early history of central banking in the US and UK, as well as the more recent innovation in policy tools utilized by developed country banks in the wake of the 2008 crisis (IMF 2013).

The expanded role of central banks described in these examples, including monetary policy coordination with government, are in contradistinction to the dominant view today – that central banks should be independent from government and other political pressures. In practice, central banks are not independent.²⁶ The institutional nature of central banks is such

²⁶ As noted by Bibow (2013), even Milton Friedman noted decades ago that independent central banks are likely to be too close to the commercial banking sector, and opposed the concentration of power in a body that is free of direct political control.

that they develop close relationships with the financial sector, and as a result, policies reflect the interests of that sector rather than the economy as a whole.

This discussion highlights that monetary policy's strength lies in its employment generation possibilities, as well as its ability to overcome asset inequality,²⁷ whether in the form of land title or other forms of wealth that serve as collateral. Inclusive monetary policy cannot be unanchored, however. To be effective and well-targeted, it must be coordinated with public investment goals. To the extent that public investment reduces inflationary pressures, central banks can afford to lower interest rates, in turn making it less costly for governments to finance public investment.

C. Capital management techniques

There is a good deal of evidence that financial liberalization has not brought with it the touted benefits of increased investment in developing countries and portfolio diversification that would reduce instability in financial markets and the real economy. On the contrary, financial liberalization appears to have had a deflationary effect that has reduced GDP and employment growth, hindering development and limiting resources to promote gender equality and other SDGs (Elson and Cagatay 2000; Ghosh 2005).

I would like to trace out more explicitly the negative effects of unregulated capital flows on the macroeconomy. This is an important exercise because their widespread effects are not immediately obvious if we only consider the impact on investment. It is important to look beneath the surface at subsidiary impacts to understand how they link to broadly shared well-being, gender equality, and achievement of SDGs.

First, as noted above, wealth holders prefer low rates of inflation. Low inflation ensures that inflation-adjusted returns on investment (the rate of return on the investment less the inflation rate) are high, which is equivalent to saying profits derived from owning money rise.²⁸ As a result, when finance is deregulated, countries competing to attract the pool of global capital are forced to take steps to quell fears of inflation (even if those fears are irrational). As noted, to do this, many central banks adopted inflation-targeting policies, reducing their flexibility to use monetary policy to ensure adequate levels of employment.

²⁷ Use of monetary policy does not preclude and indeed should not replace legal reforms, such as reforms to family codes that enable women to own and contest ownership of assets.

²⁸ Economists call profits obtained from holding wealth "rentier" income, rentiers being wealth holders. Epstein and Jayadev (2005) provide evidence that rentier income has risen substantially in the neoliberal period.

As an alternative, capital management techniques can and have been adopted to control destabilizing flows of “hot money” and maintain more stable, competitive exchange rates that expand the space to adopt expansionary monetary policies. The benefits include a reduction of macroeconomic volatility and exchange rate volatility (and thus economic insecurity), and the ability to free up reserves held by governments to insure against a financial crisis or external shocks. Although capital management techniques had faced objections from the IMF in the past, there has recently been a shift, albeit incomplete and begrudging, on the acceptability of capital controls (Ostry, Ghosh, Habermeier, Laeven, Chamon, Qureshi, and Kokenyen 2011; Gallagher and Ocampo 2013).

With regard to reserves, international financial institutions such as the IMF have required countries to maintain larger foreign exchange reserves in order to hedge against crisis from financial panics, bankruptcies, and competitive devaluations. Borrowing countries are required to place a significant portion of foreign aid into foreign exchange reserve accounts or use these funds to reduce debt. Reserves held by low-income countries amount to 8 months of imports and almost 30 percent of GDP (Rodrik 2006). The cost of holding such large reserves is the interest that could be earned from investing funds in higher-yielding financial assets as well as the potential for otherwise foregone public investment to “crowd in” private investments and reduce inequality.

Epstein, Grabel and Jomo (2004) and Gallagher (2011) review experiences with capital management techniques. (The CTTs and FTI’s discussed in the previous section on tax policy can be categorized as capital management techniques). Tools differ across countries and include reserve requirements on inflows of capital as well as diagnostic tools such as early warning systems that trigger regulation of capital flows. There is no one-size-fits-all toolkit to manage capital flows and the approach to the use of such tools has often been dynamic—that is, countries have flexibly adapted these tools to changes in the internal and external environment.

Rather than extensively review these tools, the points I wish to make here are twofold. First, there is increased policy space to adopt such tools in the wake of the crisis and other negative effects of financial liberalization, as evidenced by the increased openness of the IMF to such controls. The second point is that capital controls are a gender equality issue (Grabel 2013). Reduced volatility that leads to crisis is key to reducing women’s care burden, exhaustion of limited savings and assets during crises, and likelihood of being moved to the

back of the job queue in response to the employment effects of crisis. Moreover, the government revenue sacrificed by holding reserves can be recuperated with controls, with a beneficial effect on public investment. Policymakers pursuing gender equality then would benefit from linking what appear to be gender-neutral macro-level policies to their distributional effects on women and other groups who suffer resource deprivation in stratified societies.

VII. Conclusions

The SDGs have now placed the dual global goals of sustainability and equality at center stage. Gender equality, as a form of intergroup inequity, has special status in the SDGs, and for good reason. It would be difficult to achieve other SDGs without also improving women's absolute and relative well-being. Past approaches to gender equality have focused on the micro-level—education, health care access, support for childcare, and access to productive resources. While those initiatives are important, they are not sufficient. For example, policies to increase women's education and labor force participation will only yield their full benefits with sufficient aggregate demand to generate employment demand. Volatile macroeconomic conditions increase economic vulnerability, a burden that is much greater for those providing caring labor for others. Moreover, the resources to fund gender equality and other sustainability expenditures will be deficient in the absence of macro-level policies that can mobilize societal resources. In short, gender equality and other aspects of sustainability require a supportive macroeconomic environment.

This paper outlines a series of approaches to generating a supportive environment and resources to promote the SDGs, and especially gender equality. For many gender equality advocates, macroeconomics is a new and unfamiliar policy arena. That said, macroeconomic policy is neither gender- nor class- nor race-neutral in its effects. To advance SDGs, macro policy must be conducted through an equity lens with much more attention to its distributional effects.

Although I identify the linkages and provide some empirical evidence that substantiates those relationships, a gender-equitable macroeconomic policy agenda will benefit from much more research. There are likely to be additional linkages and policies that will support sustainable macroeconomic development and growth while also promoting

gender equality. Moreover, much more needs to be done to quantify the effects of policies on gender equality and in reverse, the impact of greater gender equality on the macroeconomy.

Two additional key points are made in this paper. Employment (livelihood) improvement should be our central macroeconomic indicator (Nayyar 2012). Second, financing for gender equality in employment and other domains can be self-sustaining because of the feedback effects from gender equality to economy-wide well-being. To that end, research on gender equality has made clear that gender-equitable livelihoods are required for sustainable development. This entails creating the conditions for women to increase their participation in remunerative work that pays well and is secure. Demand-stimulating macroeconomic policies are required in order to support this goal. Moreover, full employment is a prerequisite to address the problem of male unemployment. This will help to avoid gender conflict, resistance, and in some cases backlash as more women enter the labor force in a global context in which men's access to paid work has been falling.

Gender-sensitive public expenditures are required in order to support women's access to paid work. Public investment should be directed at expenditures that reduce women's care burden and allow for care to be more equitably shared by the state and men and women. The fiscal space to fund such expenditures requires a reformulation of the way we understand financing for development and gender equality. Financing for gender equality is an investment that yields an income stream in the future, as a result of the beneficial development and growth effects of improvements women's absolute and relative economic well-being. Adopting this approach will require a change in thinking about public finance. While we know that gender equality has beneficial effects on the macroeconomy, in order to develop fiscal space guidelines that reflect this effect, research will be needed to better quantify the macroeconomic payback. Other innovative tools are available to promote gender equality and to finance development. Openness to new forms of finance, including taxation of the financial sector, is required.

It is also time for an expansion of monetary policy tools. Monetary policy has been excessively restrictive and ineffective in promoting gender equality and development. A multiplicity of policy tools available to central banks can be adopted rather than reliance on inflation targeting and the single tool of policy interest rates. These include capital management techniques, asset-based reserve requirements, and loan guarantees in order to overcome women's lack of legal title to assets that could serve as collateral to obtain credit.

The review of monetary policy tools here suggests another lesson. Emphasis on low inflation via the policy interest rate is a mismatched tool to address inflationary pressures. Those are best dealt with through targeted fiscal policies in education, health care, and investment in strategic sectors, such as agriculture and infrastructure (Calderón and Servén 2004; Fay, Leipziger, Wodon, and Yepes 2005; Agénor 2008; Bayraktar and Moreno-Dodson 2010). The resulting economic stimulus can generate rising incomes that can pay down public debt incurred to finance the investments. These strategies can also promote green development and growth.

It is worth emphasizing more explicitly that what I am suggesting here is partial role-reversal between fiscal and monetary policy. Greater weight should be given to fiscal policy to control inflation and to monetary policy to generate employment growth. Fiscal policy would address inflationary pressures by funding social and physical infrastructure (for roads, R&D in agricultural and industry, irrigation, clean water, HIV/AIDS). Prioritization of investment projects should be gender-responsive. Lowering inflationary pressures through public investment leaves more space for expansionary monetary policy and targeted credit allocation that can stimulate employment generation. Key to both of these goals is a shift in focus away from inflation targeting by central banks and a stranglehold on sensible public sector investment that can expand the productive capacity of an economy.

Government and central banks cannot adequately pursue these goals without changing their composition. The lens for identifying appropriate public investment projects and credit targets needs to be gendered and ethnically representative. In particular, women and all ethnic groups must be given an equitable share of leadership roles within government, high-level civil service, and democratic representation processes. We otherwise risk returning to an approach that fails to prioritize the goals of well-being and equitable economic stability. The shift in representation to one that is more gender- and ethnically-inclusive is a key institutional change that needs to occur in order to propel and guide inclusive macroeconomic strategies. This not merely an equity issue. The efficacy of this approach is supported by research indicating that more diverse organizations outperform those that are more homogeneous. Complex systems economist Scott Page (2008) argues this is because with diversity comes a broader range of ideas with which to problem solve, with the result that diversity makes systems (schools, firms, societies) more productive.

A final comment regarding indicators and other data-related issues is in order. Researchers often decry the lack of data needed to measure gender equality and outcomes of policies. While there is a very real need to have better data, this does not mean that what is available is an insurmountable roadblock to policy impact evaluation. In many disciplines, methods exist to identify good proxies for the variables we would actually like to measure directly but do not have data on. Economists could learn a great deal from the field of psychology where construct validity tests are used to assess the validity of a measurement procedure (such as a questionnaire) to measure a given construct (such as depression). For the purposes of indicators of gender equality, this would mean assessing the correlation between aggregate measures (such as employment or mortality rates) with other variables that we might want to investigate but do not have data on (such as wages and health). It should also be understood that some indicators of gender equality are not likely to be applicable to all countries. For example, literacy rates may be more meaningful in sub-Saharan Africa than in Latin America and the Caribbean, and wage data are less relevant in largely agricultural societies. The development of indicators to assess SDG progress will have to deal with this complexity.

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