African Institute for Economic Development and Planning
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GENDER AND ECONOMIC POLICY MANAGEMENT INITIATIVE–AFRICA

GENDER AND MACROECONOMICS

INTRODUCTION

This module enables participants to establish a foundation in gender-aware macroeconomics. Macroeconomics is typically seen to be gender blind: It examines the economic environment in general, but it is rarely, if ever, gender neutral. A gender analysis of macroeconomics underscores both how gender relations permeate macroeconomic concepts and how macroeconomic indicators only measure a portion of total economic activity, with important consequences for unpaid care work, household well-being, and the accurate evaluation of macroeconomic policies. To help participants undertake a gender-aware investigation of macroeconomics, the module introduces and elaborates on some key aspects of macroeconomics, including social accounting frameworks, the circular flow of income and product, domestic absorption, the multiplier, the accelerator and two-gap analysis. At the end of the module, participants should be able to evaluate a series of macroeconomic concepts by their gender content.

LEARNING OBJECTIVES

At the conclusion of this module participants will:

1. Have gained an understanding of elementary macroeconomics.
2. Be able to voice a gender critique of contemporary macroeconomics.
3. Have the capacity to explain the key concepts and implications of gender-aware macroeconomics.

OUTLINE

I. Basic macroeconomics.
   A. Social accounting frameworks and the circular flow model.
   B. Domestic absorption.
   C. The multiplier and the accelerator.
   D. A two-gap model.

II. Gender-aware macroeconomics.
   A. The role of unpaid care work in macroeconomic flows.
   B. The role of gender in macroeconomic variables.
   C. A gender-aware circular flow.
   D. Gender-aware macrodynamics: thinking about policy.

DURATION

Three-quarters of a day.

I. BASIC MACROECONOMICS

Objective: to enable participants to gain an understanding of elementary macroeconomics

Macroeconomics is the study of the economy as a whole, focusing on the combined activities of all households, all firms and the government, the cumulative individual decisions of which determine the whole economy's total spending, income, and production of goods and services. Macroeconomic theory and analysis divides the economy into two spheres: the *productive (real) economy* and the *financial (money) economy*. Macroeconomic policies influence how these two spheres interact.

The productive economy combines labour, capital, other productive factors (land, energy, natural resources) and technology to produce the economic output for exchange that comprises gross domestic product (GDP). The productive economy is also called real because the factors of production as well as the output produced in this economy are physical. The public sector operates as part of the real economy and is financed by fiscal policy—government policy regarding to government spending and taxation.

The financial economy consists of the economic activities that involve the issue and exchange of financial assets, such as stocks and bonds. Government affects the financial economy through monetary policy—policy regarding the supply of money and the interest rate, which affect the demand for money and other financial assets as well as the performance of the financial economy overall.

The relation between the real economy and the financial economy, as well as the role of government in affecting that relation, is a matter of some debate in macroeconomic theory, but linkages do exist: For example, the setting of interest rates within monetary policy has implications for the production of output and employment in the real economy.

A. SOCIAL ACCOUNTING FRAMEWORKS AND THE CIRCULAR FLOW MODEL

SOCIAL ACCOUNTING FRAMEWORKS

Adding up all the transactions of all households and firms as well as the government would be difficult, so it is necessary to sort activities into analytically useful categories and record the pattern of activities done by the various economic units—households, firms and government. This is what social accounting frameworks do, and in so doing, they detail the flows of goods and services between economic units, often called agents or actors, engaged in the buying and selling of products, including the inputs necessary for firms wanting to transform resources into goods and services that can be bought and sold. Social accounting frameworks can assist in understanding the key relations, if any, among the many transactions taking place between economic units in the economy as a whole.

THE CIRCULAR FLOW MODEL

(The facilitator should draw the model clearly, ensuring that all participants understand.)

Begin by initially ignoring government. Households provide inputs—primarily labour—to firms for wages. Firms use those labour services to produce goods and services, which can be sold to households for cash. Households thus get money from the sale of labour to pay for goods and services that firms produce. There are therefore two sets of flows:

1. The flow of income (Y)—payments for labour are turned into payments for goods.
2. The flow of production (C)—the flow of labour resources from households are turned into goods and services that households consume.

Ignoring savings for the moment, the idea that the money value of the incomes of households must equal the money value of all the output of firms and the money value of household spending provides the basis for the national income accounting discussed in Module 1 on gender and economics as the system of national accounts (SNA).

Some primary categories that are included in the SNA accounts are:

a) The private production of goods and services measured at market prices.

b) The public sector, often valued in terms of labour costs and not the value of services produced.

c) The private production of goods in the household, which a third party could provide. These goods need not be exchanged. As already discussed in Module 3 on unpaid care work, challenges exist in measuring this accurately, and production is often valued using market prices of similar goods.

d) Informal activities, where again the challenge is accurate measurement.

e) Imputed values of certain private services (e.g., housing).

However, households do not spend all their money. Some money is saved (S) by households in the financial economy, to provide consumption in the future. Bringing in government, some money is taxed (T) by the government from the household for its activities. So some of the flow of income leaks out:

- Savings (S) flow into financial markets.
- Taxes (T), also called forced savings by economists, flow to the government.

Government uses taxes to buy goods and services from firms and makes transfer payments to households (G). Firms get investment (I) funds from the savings deposited in financial markets to buy plant and equipment to increase their capacity to produce goods and services in the future. Thus, there are injections into the flow of income as well:

- Investment by firms (I) financed from financial markets.
- Government spending (G) financed from tax receipts.

Firms also pay taxes, included in (T). Finally, some of the goods and services purchased by households, firms and government are made abroad, while some of the goods and services produced by firms are sold abroad. So there is a further leakage of income, exports (X), and a further injection, imports (M).

This simplified account provides two circular flows:

1. The flow of goods and services produced on and for the product market for a given period of time by all the people of the country, or *gross national product* (GNP).
2. The flow of income (Y) received for resources sold in the input market for a given period of time by all the people of the country, or *gross national income* (GNI).

Expressed as variables, GNP and GNI appear as follows:

$$GNP = C + I + G\ [+ (X - M)]$$
$$GNI = Y + S + T$$

Output flows should equal income flows:

$$C + I + G\ [+ (X - M)] = Y + S + T$$

In other words, total income on the right hand side of the equation should equal all spending on consumption, investment, government spending and net exports on the left hand side of the equation. However, as there is usually a time lag in all this buying and selling, in practice they may not formally add up.

B. DOMESTIC ABSORPTION

(The facilitator should go through the model clearly, ensuring that all participants understand the simple algebra, which many will find

challenging out of a fear of numbers. It is important to take time here, as this significantly demystifies macroeconomics and macroeconomic policy.) As

$$GNP = Y,$$

then,

Government spending is a form of consumption and investment spending, so for simplicity, collapse government spending into those terms, resulting in:

$$Y = C + I + (X - M).$$

Rearranging

$$C + I = Y - (X - M),$$

this suggests that goods and services absorbed in an economy can either come from domestic production (C + I – X) or from abroad (M). Defining domestic absorption as

$$A = C + I$$

substituting A for C + I so that

$$A = Y - (X - M)$$

and rearranging shows that

$$Y - A = X - M$$

1. If net exports (X – M) are negative, then the public and private sectors are consuming and investing (absorbing) more than the country is producing domestically, which raises the question of how this domestic absorption is being financed. Clearly, the rate of domestic absorption—levels of consumption and investment beyond what the country can afford to import—can be an important internal source of macroeconomic imbalance.

2. If an external shock cuts exports, this must affect domestic absorption because if (X – M) drops, A must fall or Y must rise. The economy must adjust by altering the rate of domestic absorption.

A simple rule of thumb is that macroeconomic policy is concerned with maintaining macroeconomic balance by altering the rate of domestic absorption to compensate for internal or external macroeconomic imbalances.

DEMAND-SIDE POLICIES

Demand-side policies alter the pattern of spending within an economy. This can take one of two forms:

- An attempt to increase the rate of domestic absorption by increasing public and/or private spending and thus public and/or private demand. These expenditure-increasing policies therefore raise C, I and/or G, boosting aggregate demand and, as will be seen, economic growth.
- An attempt to reduce the rate of domestic absorption by cutting public and/or private spending and, hence, public and/or private demand. These policies are often called expenditure-reducing policies, because C, I and G are brought down. Cutting consumption and investment cuts aggregate demand, however, and in so doing, affects economic growth.

FISCAL AND MONETARY POLICY

Fiscal policy is government policy toward its taxation and spending plans. Monetary policy is government policy toward the supply of money and hence interest rates, which are the effective price of money. The government can use fiscal and monetary policies to alter the rate of growth in one of two ways:

1. To increase the rate of growth of demand.
    - When government spending increases, there is an increase in

government demand for goods and services from the private sector.

- When government taxes fall, there is an increase in household and firm demand, as they are paying less to the government and thus have higher levels of disposable income to spend.
- When interest rates fall, the level of investment by firms increases, as it becomes less expensive to borrow from the financial economy and the holding of money by households and firms in the financial economy becomes less attractive.

2. To reduce the rate of growth of demand.

- When government spending falls, there is a reduction in government demand for goods and services from the private sector.
- When government taxes rise, there is a reduction in household and firm demand, as they are paying more to the government and thus have lower levels of disposable income to spend.
- When interest rates rise, the level of investment by firms falls, as it becomes more expensive to borrow from the financial economy and holding of money by households and firms in the financial economy becomes more attractive.

Demand management thus alters the rate of domestic absorption. It may increase private or public spending, and hence increase economic growth, to solve the problem of inadequate domestic absorption. Alternatively, it may induce expenditure-reducing cuts in private or public sector spending, and hence reduce economic growth, to solve the problem of excessive domestic absorption.

SUPPLY-SIDE POLICIES

Supply-side policies alter the pattern of production of goods and services within an economy to increase the domestic production of goods and services and reduce the demand for foreign goods and services, thus reconfiguring the composition of domestic absorption away from externally produced goods and services and toward

domestically produced goods and services. For this reason, supply-side policies are also called expenditure-switching policies because Y and X are increased and M is decreased.

MARKET DEREGULATION POLICIES

Supply-side policies involve dismantling a range of interventions that affect the operation of markets, to increase either the efficiency of resource utilization within an economy or the productive capacity within an economy, both of which promote an expansion of production and economic growth. Price controls, taxes, subsidies, trade restrictions and the operation of monopolistic state-owned enterprises bypass markets and so reduce the efficiency of markets in allocating resources in the real economy. Supply-side policies remove these distortions and thus deregulate the market to permit market-determined prices to reflect market-determined costs, better allocating the resources of households and firms and enhancing the supply capacities of the economy without cutting consumption.

C. THE MULTIPLIER AND THE ACCELERATOR

Ignoring tax payments to the government, households can consume or save their income, which means

$$C + S = Y.$$

This means that consumption is a fraction of total income,

$$C = cY,$$

where c is called the *marginal propensity to consume* out of an additional amount of earned income—here, the portion of income that goes to consumption expressed as a fraction. This also means that savings is a fraction of total income,

$$S = sY,$$

where s is called the *marginal propensity to save* out of an additional amount of earned income—here, the portion of income that goes to savings expressed as a fraction. It follows then that

$$c + s = 1.$$

Recall that

$$Y = C + I + G + (X - M).$$

Exports and imports are for consumption, investment or the government, and so can also be collapsed into total consumption, investment and government spending

$$Y = C + I + G.$$

But government spending is also on consumption and investment, and so it too can be collapsed into total consumption and investment spending. This simplification results in

$$Y = C + I.$$

As

$$C = cY,$$

then cY can be substituted for C, resulting in

$$Y = cY + I.$$

Rearranging gives us

$$Y - cY = I$$

$$Y(1 - c) = I$$

$$Y = I / (1 - c).$$

This is the famous multiplier, derived by John Maynard Keynes and Michal Kalecki. Because c is less than 1 and in the denominator, the multiplier demonstrates that in a condition where some resources are not being used—less than full employment, in the terminology—investment will generate an increase in total income that is greater than the initial investment. So investment drives economic growth. Moreover, the increase in incomes and output brought about by the increase from investment should lead to an acceleration of investment because of growth and further increases in income and output, by a principle known as the accelerator. For Keynes and Kalecki, the existence of multiplier-accelerator interactions was a strong argument in favour of government investment in the economy when the economy was at less than full employment, because the increase in output and income generated by the investment would be greater than the initial investment and would increase employment. If the government did not have the money to undertake the investment, Keynes and Kalecki advocated government borrowing, again because of the increase in income brought about by the investment, which could in principle allow the borrowing to be repaid even as employment and output levels increased—the so-called balanced budget multiplier.

EXERCISE 1

Objective: to review the multiplier process and to enable students to be able to derive the multiplier

Divide the participants into groups of four or five, with at least two economists per group.

1. Have the participants in the group review and explain to each other the following terms:
    - Income.
    - Consumption.
    - Investment.
    - Marginal propensity to consume.

2. Assume that all exports, imports and government spending goes into either consumption or investment so that you can work with the simplified national accounting identity:

$$Y = C + I.$$

Let investment equal US$19 billion and the marginal propensity to consume equal 0.8. Have the group calculate the equilibrium level of income.

3. Let investment rise by US$1 billion to US$20 billion. Calculate the multiplier.

4. How much does an increase of investment of US$1 billion increase equilibrium income?

5. In light of the multiplier, should the government try to affect the level of economic activity? If so, what sorts of government activities should be used to do so?

Give the participants 30 minutes to work through the exercise. At the end of that time, in plenary, ensure that all answers are correct by having groups provide and explain their responses to the questions.

D. A TWO-GAP MODEL

As households can consume or save, their savings is equal to income minus consumption:

$$S = Y - C.$$

The national accounting equation is

$$Y = C + I + G + (X - M).$$

Collapsing government spending into consumption and investment, the equation can be rearranged so that

$$Y - C = I + (X - M).$$

This means that

$$S = I + (X - M)$$

and finally that

$$I - S = M - X.$$

This accounting identity says that a surplus of imports over exports allows a country to invest more than it saves, which through the multiplier-accelerator principle increases output, employment and economic growth in excess of the initial investment. If a country uses imports to invest more than it saves, it can show up in the balance of payments as a trade deficit. This trade deficit will have to be paid for in foreign exchange—that is, by borrowing from other countries. For investment goods to be imported in excess of exports, countries require access to foreign exchange to pay for those goods because the export of goods and services from the country does not provide sufficient resources to pay for the import of sufficient investment goods. Therefore, in a developing country, there exists a minimum foreign exchange requirement that can be financed through foreign borrowing which can be used as a source of finance for two gaps:

1. The first gap is between investment and savings. Growth can be constrained by insufficient savings to finance the purchase of investment goods. The difference between I and S is termed the investment-savings gap.

2. The second gap is between imports and exports. Growth can be constrained by insufficient foreign exchange to finance the purchase of investment goods from abroad. The difference between M and X is termed the import-export gap, but is more commonly known as the foreign exchange gap.

Two-gap analysis emphasizes the roles of imports and foreign exchange in supplementing domestic savings to finance investment and its associated multiplier-accelerator effects, which spur growth. The analysis determines the size of the gap and hence the amount of foreign

borrowing required to fill the gap, as well as the amount an economy would then have to allocate toward repaying the resulting debt to other countries in the future.

To get out of debt, the country must make investments with the foreign borrowing that generate an increase in the rate of savings that can be used to repay the borrowed amount. The increase in the rate of savings will be a function of an increase in the efficiency of production, and hence, an increased rate of growth, as production is increasingly determined in markets. Optimally, the increased efficiency of production should be for export, as an increase in the rate of exports is needed to address the foreign exchange gap. Thus, for developing countries a condition of long-term growth is that the balance of payments deficit does not constrain the economy. A simple rule of thumb to achieve this outcome is that the rate of growth of exports should be greater than the interest rate, which dictates the amount of money that has be directed to paying down debt; when such holds, export receipts will cover interest payments.

EXERCISE 2

Objective: to use a two-gap model to better understand macroeconomic imbalance

Participants should be divided into groups of four or five, with at least two economists per group. Each group should carefully examine Table 1, where absorption is defined as private and public consumption and investment. Gross domestic savings are defined as investment plus net exports. The resource balance is defined as net exports.

Using the data in Table 1, give participants 30 minutes to estimate the size of the investment-savings gap and the foreign exchange gap for the Republic of the Gambia between 1970 and 1992. Ask the students to consider which constraint is more binding and why.

TABLE 1. GAMBIAN MACROECONOMIC BALANCES, 1970 1992			
	Domestic absorption	Gross domestic saving	Resource balance
1970	115,513,600	5,850,592	286,496
1975	214,406,000	33,675,200	6,693,696
1980	513,899,808	2,870,016	(104,500,096)
1985	1,165,900,032	55,399,940	(80,699,904)
1990	2,917,499,904	231,000,096	(287,900,192)
1991	3,412,600,064	116,400,096	(464,999,904)
1992	3,728,999,936	80,399,872	(544,300,032)
Note: All figures are in current prices and in local currency. Parentheses indicate negative figures.			
Source: World Bank World Tables 1994.			

At the end of 30 minutes, ask for their answers. The facilitator should review the key points:

- Net exports equal X – M, which must equal S – I.
- Therefore, the resource balance multiplied by –1 gives I – S = M – X
- Therefore, investment greatly exceeds savings. The critical gap is in foreign exchange: This is the source of imbalance.
- Generally discuss the relation between the resource balance and domestic absorption; stress that the economy is absorbing more than it can afford to in order to invest and, through multiplier-accelerator effects, foster economic growth.
- Ideally, if investment is channelled into export production the foreign borrowing needed to pay for the investment will be repaid from increased export earnings.

Ask participants whether this was a good or a bad macroeconomic strategy for a country like The Gambia.

II. GENDER-AWARE MACROECONOMICS

Objective: to enable participants to explain the key concepts of gender-aware macroeconomics

EXERCISE 3

Objective: to critically assess the strengths and weaknesses of national accounting frameworks

Divide the participants into groups of four or five. Each group must answer the following questions in 30 minutes:

1. What is the circular flow of income and product?
2. Households are found in the circular flow. However, only SNA activities in households are captured in national accounts. Why is this the case
3. Why are national accounts not constructed to capture unpaid care work? Is the use of the concept of the household in the circular flow useful if unpaid care work is not captured in the circular flow?
4. Do the national accounts capture activities in the informal economy? Is the use of the firm in the circular flow useful if informal economic activities are not captured in the circular flow?
5. Is voluntary community labour significant in rural Africa? Is it captured in the circular flow? Is the use of the circular flow useful if voluntary community labour is not fully captured in the circular flow?
6. Should national accounting frameworks be rethought to include unpaid care work, informal economic activities and voluntary community labour?

Facilitators should briefly review the results of the group work in plenary. Stress the following points, which review material from modules 1 and 3:

- What is excluded in national accounting frameworks?
  a) Household production of services (unpaid care work and other unpaid household work that does not produce goods).
  b) Activities that you cannot theoretically hire someone else to do (e.g., learning, studying, even though such investments add to economic productivity).
  c) Certain categories of household investments may be excluded (or not valued completely). For example, repairs and improvements made to a house or property that do not involve hiring someone else, but which raise the asset price, may not be properly valued.

- There are therefore clear limits to standard macroeconomic indicators.
  a) They may give misleading assessments of well-being or economic outcomes, as demonstrated in Module 3.
  b) They may hide and obscure women's contributions to the economy by ignoring or undervaluing their labour and the services they provide.
  c) They fail to account for certain costs such as the full cost of raising children as well as the cost of care at home and in the community.

A. THE ROLE OF UNPAID CARE WORK IN MACROECONOMIC FLOWS

a) As demonstrated in modules 1 and 3, households are where unpaid care work and other unpaid labour takes place—productive activities that are excluded from the macroeconomic models discussed above.

b) Households do not just spend their income on what is produced. Without unpaid care work, many consumption goods (e.g., food) could not be consumed and the production and sale of goods and services by firms could not take place because such production relies upon households using unpaid care work to produce labour capable of working.

c) Macroeconomic analysis therefore needs to include labour as a produced factor of production, taking place in households and requiring unpaid care work and the allocation of real resources for investment in the capabilities of labour, otherwise known as *human capital*.

d) Unpaid care work also takes place outside the household and in the community, in the form of voluntary service, which contributes to the maintenance of the rules, norms, and values of civic responsibility and social community, otherwise known as social capital.

B. THE ROLE OF GENDER IN MACROECONOMIC VARIABLES

a) Households are assumed to act in a unified way in macroeconomics, but as demonstrated in Module 3, this assumption cannot be sustained.

b) The intra-household division of labour between women and men determines the division of labour between the productive and financial economy and household activities. Gender relations thus segment labour markets; as demonstrated in Module 5 on employment and labour markets, unpaid care work affects and is affected by segmented labour markets, and households are crucial to mediating the relation between the two forms of labour. This affects production, productivity and incomes (Y), which in turn affects consumption (C), investment (I), savings (S) and the distribution of output.

c) So aggregate macroeconomic variables—consumption, investment and savings—may be systemically gender differentiated. There is ample evidence to support this proposition.

C. A GENDER-AWARE CIRCULAR FLOW

(The facilitator should clearly redraw the gender-aware circular flow, ensuring that all participants understand all the steps involved.)

a) So gender-aware macroeconomics reconceptualizes the economic production of national output by adding a sector—the household and community care sector—to the traditional conception of the economy as the interaction of the private (i.e., small and large business) sector and public (i.e., government) sector. Each of these sectors can be considered as economies in their own right.

b) The private sector supplies consumption (C) and investment (I) goods and services to the public and household and community care sectors. The private sector is regulated by markets. The informal sector remains undercounted, which has gender implications that must be explored.

c) The public sector provides social and physical infrastructural investment (G) used for consumption and investment in both the private and household and community care sectors. The public sector affects the flow of income and product. It is market-regulated, but less so than the private sector. The employment pattern in the public sector may have gender implications that must be explored.

d) The household and community care sector produces goods and services for use by individuals, households and communities. It supports the private and public sectors by supplying potentially productive human capital as well as social capital. Workers in the household and community care sector are not formally paid, although some aspects may be supported by government transfer payments. The sector is regulated not by markets, but by social norms and conventions that reflect the unequal power relations that exist between women and men. The employment pattern is affected by gender, and must be explored.

D. GENDER-AWARE MACRODYNAMICS: THINKING ABOUT POLICY

a) The gender-aware circular flow is a comparatively recent development in economics and there is no consensus about how to formalize the relations among the private, public, household and community care sectors. The integration of gender-aware macroeconomic analysis into an understanding of the financial economy is also contentious.

b) It is clear that the unpaid care economy affects the performance of the private sector, in both its real and financial-sector activities, as well as the performance of the public sector. Simply put, if unpaid care work ceased, the private commodity economy and the public service economy could not work.

c) It is also clear that changes in the real and financial economies affect the household and community care economies. In the recent global economic crisis, increased unpaid care work in households has acted as an invisible social safety net for those rendered unemployed.

d) As there is no consensus, a starting point by which to consider macroeconomic dynamics from a gender perspective is to review the key insights elaborated earlier in this module.

- Domestic absorption (C + I) requires the provision of unpaid care work. This suggests that in the short run, the inability to supply an adequate amount of unpaid care work may be a source of macroeconomic imbalance. It also suggests that in the long run, a reduction in the amount of unpaid care work will require a corresponding increase in paid care work if macroeconomic imbalances are to be avoided.
- Demand- and supply-side policies designed to reconfigure the rate of domestic absorption should be considered from the perspective of their effect on the household and community care economy.
- Demand-side policies that seek to reduce spending may be predicated upon an unacknowledged increase in unpaid care work, with implications for gender equality. Demand-side

policies that seek to increase spending can do so in ways that redistribute and ultimately reduce unpaid care work, with implications for gender equality.

- Supply-side policies that seek to increase productive efficiency as well as multiplier-accelerator interactions are affected by gender relations. The capacity of such policies and investment to bring forth proportionately greater increases in output and income are predicated upon an expansion of paid employment that may require an intensification of unpaid care work—or may not be forthcoming because of unpaid care work responsibilities that are allocated on the basis of gender inequality. Alternatively, supply-side policies may be predicated upon investments in infrastructure that reduces unpaid care work and in so doing facilitates an expansion of paid employment, increasing production.
- The same logic is true of policy approaches to the foreign-exchange gap: It should be evaluated from the perspective of the impact that it has on unpaid care work, because unaddressed gender inequalities may prevent this gap from closing, with harmful effects on the national debt.
- Given the importance of investment to economic growth, it is also necessary to reconsider the meaning of investment. In macro-economics, investment is expenditure in the present that defers current consumption to increase consumption in the future. Spending on education and health are therefore not considered investment because the expenditure in the present increases the consumption of education and health care in the present. Yet it is well-established that spending on social investments in health and education generates a stream of benefits in the future; as human capital is built and productivity

enhanced, consumption in the future is increased. There is ample evidence to support this proposition. The multiplier-accelerator interactions emerging out of investment in human capital formation can generate a strong case for social investment directed at women to reduce unpaid care work, with implications for gender equality.

- The two-gap accounting identity ($I - S = M - X$) needs to be considered from a gender perspective. Inadequate savings to finance the investment savings gap may emerge from gender-differentiated savings patterns, as evidence demonstrates that, in the aggregate, women save more than men do. It is also necessary to reconsider the character of investment: Investment in female human capital formation has implications for gender equality and long-run productivity.
- In other words, in considering the operation of the macro-economy, it is necessary to consider whether there is a care gap that policy can—or must—address.
- An important starting point for a gender-aware macro-economics is to commence analysis from the perspective that gender relations permeate the major macroeconomic variables. Production (X), incomes (Y), consumption (C), investment (I), savings (S) and the distribution of output must be considered as an outcome of a prevailing structure of gender relations—possibly conceptualized as a third sector in the economy—that reflects and is reflected in the distribution of unpaid care work. As noted in Module 3, then, the capacity of an economy to supply adequate amounts of care is an important constraint on economic activity in the real economy, and the supply of care may be predicated upon gender inequality.

READINGS

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