

Financing Climate Change in Developing Countries: Trying an Old Remedy¹

Jan Kregel

In his book “In the Long Run We are All Dead” Geoff Mann² asks why Keynesian deficit spending has always been, and continues up to this day, to be the standard policy response of governments to economic crisis, irrespective of political persuasion and despite sustained criticism from balanced fiscal budget hawks. His thesis is that “Capitalist modernity, in fact, is and always has been Keynesian on the inside, as it were—the call for the state when disorder looms or revolution threatens has always been an option, ... when the social order is fraying, it is the art and science of revolution without revolutionaries. ... If Keynesianism returned with the most recent crisis, it is not because of Keynes’s theory of effective demand or his employment function, but because climate change, war and accelerating inequality seem to have put what many think of a “civilization” on the ropes. ... The panic that gripped Europe and North America following the bankruptcy of Lehman Brothers in fall 2008 was partly motivated by rich people’s frantic effort to stay rich, but it was also motivated by lots of not-that-rich people’s fears that we were at some tipping point in the social order. Those people, were not, primarily, trying to save capitalism, they were trying to stave off a calamity caused by capitalism, in the hope that something better will come along. That is what Keynesianism is, and always has been, all about. “

Indeed, the response of virtually all governments to the recent Covid19 pandemic, to the rectification of current and future climate catastrophes, and the bellicose political confrontation in central Europe, has confirmed Mann’s hypothesis. Faced with quarantine generated unemployment, costs of increasingly frequent climate damage, and the subsequent historically high food and energy prices, and the costs of defensive armaments, governments from Germany, to the UK to the US have all quickly introduced Keynesian policies of debt financed income supplements to placate an angry population.

However, in developing countries, faced with catastrophic environmental damage, but with less fiscal space, the “Keynesian” expenditure policies to support domestic incomes have been financed by increased external deficits. As Lerner³ pointed out long ago, as long as debt is held internally the major impact is one of domestic redistribution of income; building on Lerner’s insight, MMT has pointed out that sovereign governments need never repay nor default on debt generated by domestic deficit spending. Neither the spending nor the debt can create a real cost since they always remain within the domestic economy. It might produce a redistribution of income but does not have a real cost.

But Lerner also pointed out a basic difference between internal and external deficits: “Increasing debt to other countries or to the citizens of other countries does indicate impoverishment of the borrowing country and enrichment of the lending country. ... The country cannot by monetary manipulations consume more than it can produce, as every country is acutely aware at this time.” Echoing Keynes’ discussion of reparations after Versailles, Lerner noted: “For a country to borrow from another country may be foolish or wise according to circumstances, ... Such debt should be limited because the repayment will constitute a real burden on the country just as the borrowing provided a real benefit

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² *In the Long Run We Are All Dead: Keynesianism, Political Economy, and Revolution*, London, New York, Verso, 2017.

³ Abba P. Lerner, *The Economics of Control*, London, The Macmillan Co., 1946.

quite different from any benefit that can accrue from internal borrowing. When the time comes to make the repayment there may be great inconvenience which could lead to default. But none of these considerations is at all applicable to internally held national debt which from the point of view of the nation cancels out. internally held national debt which from the point of view of the nation cancels out. The proper analogy to the incurrence of internally held national debt is not an individual borrowing from another individual but an individual borrowing money from one of his pockets to put it into another. ” (Op. cit. 305-6) This means that there is a differential burden on developing countries responding to the crisis in terms of the real costs of servicing the external debt. While debt ratios have been further aggravated in all countries by the increasing interests rates led by developed countries’ central banks to offset the impact of these events on inflation rates, this further increasing the differential burden placed on developing related to developed countries.

The “Keynesian response” to the current environmental and geopolitical crises may assuage the malaise of the general population but will have the counterproductive result of creating a global debt crisis without resolving the underlying problems. In developed countries the income support measures delay rather than promote structural adjustment, while generating pressure to reign in government spending for more direct environmental adjustment measures. Further, the use of Keynesian policies have accentuated the inequal burden in which those developing countries less able to respond to the crises have the greatest real domestic burden of structural adjustment required by the current crisis.

The obvious conclusion is that the resolution to the current crises via “Keynesian” policies is not the appropriate solution because it produces an inequitable burden across countries at different level of development without providing a solution to the real problems in the required structural adjustments. In simple terms the problems that are created by the impact of economic behaviour on the environment may be described as follows: . First, a redistribution of global water supplies from ice to ocean, from ocean to air, to peak storm discharge to drought. This in turn will lead to a structural redistribution of food production and of the global population.

Keynes provides one approach to how to manage the absence of the market solution to the problem. At the end of his *General Theory* he suggested that “if our central controls succeed in establishing an aggregate volume of output corresponding to full employment as nearly as is practicable, the classical theory comes into its own again from this point onwards. If we suppose the volume of output to be given, i.e. to be determined by forces outside the classical scheme of thought, then there is no objection to be raised against the classical analysis of the manner in which private self-interest will determine what in particular is produced, in what proportions the factors of production will be combined to produce it, and how the value of the final product will be distributed between them.... Thus, apart from the necessity of central controls to bring about an adjustment between the propensity to consume and the inducement to invest, there is no more reason to socialize economic life than there was before”.⁴

If we substitute the words “sustainable environment” for “aggregate volume of output corresponding to full employment” and “volume of output to be given” in the above passage we arrive at the appropriate adaptation of the theory. When the supplies elasticities are not sufficiently high to produce structural adjustment or when the time constraint does not allow for market adjustment then the government is charged to intervene to provide the required changes in productive structure in which the private sector

⁴ J.M. Keynes, *The General Theory of Employment, Interest and Money*, London, Macmillan 1936, 378–9.

can continue to operate to “determine what in particular will be produced.” Government managing the adjustment which is required but prevented by the support for austerity. In the present case we are faced with particular characteristics – the debts we are facing cannot be written off, and they are in general cross border which means transfers are impossible.

Look at the problem from another perspective suggests that use of Keynesian theories of adjustment are inappropriate for another reason. Schumpeter had already criticised Keynes’ *General Theory* for the simplifying assumption that the structure of production was independent of the level of effective demand⁵. The analysis of the impact of demand on the sectoral composition of output was ignored. Yet, the resolution of the crises we face today will require changes in the economic structure, not in ensuring the full utilization of a given productive structure which is the objective of the Keynes theory.

The production structure by Keynes in *How to Pay for the War*,⁶ there the question was primarily the appropriate balance between saving and investment to reduce production of consumption relative to investment in military goods. Joan Robinson’s elaboration of disguised unemployment⁷ broached the question of the sectoral distribution of employment when she noted that a shift in workers across sectors with productivity differentials could affect productivity and the definition of full employment output given the productive structure. It was left to VKRV Rao⁸ and others to extend this insight to analysis of developing economies in a model that was based on the sectoral structure of production that occurred when a manufacturing sector was created to absorb underemployed peasant labourers. This process was eventually enshrined in Arthur Lewis’ “classical” model of unlimited supplies of labour.

For the majority of the development pioneers a balance production structure could be supported by government expenditure via the multiplier increasing productivity. While this did not meet Schumpeter’s complaint of the absence of discussion of the impact of innovation on the structure of production, it did focus on the importance of changes in the sectoral composition of output to include manufacturing where the potential for innovation was greatest.

The difficulty in achieving these changes in the structure of production was highlighted by the historical evolution of the terms of trade which led to discussion of the global structure of production in Myrdal’s emphasis of cumulative causation and the Prebisch⁹-Furtado¹⁰ theories of relations between the centre and periphery. This approach linked the changes in the domestic and international structures of production in the discussion of the international division of labour. Structural adjustments had to be global.

The application of these issues was generalized in Marcelo Diamand’s theory of Unbalanced Productive Structure¹¹. Diamand’s message is not so much the imbalances in integrated processes of production

⁵ *History of Economic Analysis*, New York, Oxford University Press, 280, n.6.

⁶ London, Macmillan, 1940

⁷ Joan Robinson, “Disguised Unemployment,” in *Economic Journal*, 225-37 1936.

⁸ Rao, V.K.R.V. 1952. “Investment, Income and the Multiplier in an Underdeveloped Economy”, *Indian Economic Review* 1(1), 55–67.

⁹ Prebisch, R. 1950. *The Economic Development of Latin America and Its Principal Problems*. Santiago: United Nations Economic Commission for Latin America.

¹⁰ Furtado, Celso. 1964. *Development and Underdevelopment*. Berkeley, CA: University of California

¹¹ See Marcelo Diamand, “Towards a Change in the Paradigm of Development Through the Experience of Developing Countries,” *Journal of Development Economics*, 5 (78), 19-53

which produce bottlenecks as it is the difficulty of market mechanisms to effectuate adjustment when faced with bottlenecks or other supply constraints. Both Lerner (Op.cit. 378) and Prebisch¹² had already noted the importance of appropriate supply elasticities in the market process in adjustment to sectoral imbalances. Diamand applied this approach to the 1970s oil crisis where much as today there was little supply response to a substantial increase in prices so adjustment had to come in quantity to the available resources; the corollary was a redistribution of income from the general population to the owner of the inelastic resource. If you need a visible confirmation, check last quarter profits at Aramco, or any other energy company.

But all of these theories were short on explanations of how to produce these structural changes, and the attacks on planning launched as part of the cold war made such solutions politically difficult. In addition, little attention was given, aside from foreign aid, to the financing of these structural changes in developing countries. Again, the simplified Keynes theory was part of the problem. The Kahn- Keynes multiplier masked the logistics of financing the expansion of demand by arguing, against the Treasury view, that at the domestic level, investment would generate the savings needed to balance it. Big Push and Balanced growth theories sought to preserve this approach. But the real problem was the development of a financial structure capable of directing savings in the form of financial instruments required to achieve the necessary investment. But this approach again applies at the domestic level. It cannot resolve the differential burden faced by developing countries. This would require a global solution. Although Rosenstein Rodan¹³ was careful to address the supranational question of the financing for the newly created national economies in southeast Europe to access the financial resources necessary for the Big Push¹⁴.

Thus, the theories available to replace the simple “Keynesian” solutions are still insufficient because they lack a clear financing mechanism of how structural changes can be generated, and in particular how the differential costs can be more equitably distributed across countries. Part of the solution to the environmental crisis must then include a mechanism of global redistribution global distribution of the financial burdens of the required structural adjustments.

But, in the present context the common methods of dealing with the differential costs generated by the rising debt service is not available: debt forgiveness. No HIPIC process will solve the problems created by the pandemic-environmental-political catastrophes. The debts we are now dealing take the form of what we have borrowed from nature, in the form of environmental degradation, and which now have to

¹² An example is R. Prebisch, “Commercial Policy in the Developed Countries”, *American Economic Review*, Vol 49 (2) 1959

¹³ Paul Rosenstein-Rodan, “Problems of Industrialization of Eastern and South- Eastern Europe”, *Economic Journal* v 53, No. 210/211, (1943), 202-11.

¹⁴ He suggested combining individual national investments in a trust with governments’ guarantees. “Its main outlines are: at least 50% of the capital required must be supplied internally. “Creditor” and “debtor” countries acquire each 50% shares of the trust formed of all the industries to be created in the region. They will plan to proceed as business partners with Government representatives on the board. The creditors acquire shares in the trust which are redeemable after 20 years at 10% above parity if an average dividend service of 4 1/2% at least has been maintained in the past. An average dividend service of 3% is guaranteed by governments on the shares subscribed in their countries. Private investments in Eastern and South-Eastern Europe requiring foreign credits are licensed. Shares may be acquired by contributions in natura: for instance the establishment of branch factories. Guarantees of nondiscrimination in the internal taxation policy will be obtained from Eastern European authorities.” (Op. cit. 209-210)

be repaid. They are similar to unrequited or odious debt. Nature is not a creditor that can write off these debts, they have to be met. And they cannot be repaid in the normal sense, there is no transfer mechanism that allows this to take place as even the best COP proposals simply serve to stop the borrowing, to stabilize the borrowing from nature at some hypothetical level of temperature increase. And as Diamond and Lerner have emphasized there is no market mechanism to bring about the required measures.

Since the problem is not so much the costs of meeting the challenges of global climate change – they have to be met and they are real, the basic problem is the global distribution of these costs created by the fact that developed countries can deal with them via creation of internal deficits and debt while this is not available to developing countries. This means the problem has to be dealt with on the level of a global financial institutions. We could think of this as making the global financial system on the pattern of a domestic system, so that following Lerner the question is simply one of looking at distribution between my left and right pockets. In essence, this is the same type of system that Keynes has proposed in his proposal for a global clearing union of external deficits and credits based on what he called the “banking principle”: “the necessary equality of debits and credits, of assets and liabilities. If no credits can be removed outside the banking system but only transferred within it, the Bank itself can never be in difficulties.”¹⁵ We can think of this as the mirror of Lerner’s affirmation that government debt creating deficits cannot produce a real cost since there is always a necessary equality of debits and credits. In such a system, the debts and credits are always internal to the global clearing system.

Keynes was not the only one who made proposals based on the banking principle for a global clearing system¹⁶. While there are no costs related to global deficits offset by credits, there is an implicit or notional cost for the creditors. This is either in terms of forgone imports for consumption or to satisfy a domestic preference for price stability. The problem for a clearing system to respond to the problem of the differential burden created by debt financing for climate loss and reparation and remediation by the use of international deficits on the part of developing countries requires a way to reduce the costs to developed countries.

Of the various versions of global clearing systems, one proposed by Hjalmar Schacht¹⁷ after the second war merits investigation. He followed Adam Smith in noting that the use of gold as global currency was inefficient and could be released for financing domestic business investment if paper money could be substituted. Schacht makes a similar argument in relation to the massive gold supplies held after the second war which could be used to finance reconstruction. He proposed a transfer of the US earmarked gold supply in Fort Knox to special German account in the Bank for International Settlements to a earmarked for German reparations. He notes that this transfer represents no real cost to the US. He this

¹⁵ J. M Keynes, *The Collected Writings of John Maynard Keynes*. Edited by D. E. Moggridge. Vol. 25. Activities 1940–1944. Shaping the Post-war World: The Clearing Union. London: Macmillan, 1980, 44..

¹⁶ I have outlined some of them in Working Paper No. 833, “Emerging Markets and the International Financial Architecture: A Blueprint for Reform”, February 2015 and Public Policy Brief No. 154, , “Another Bretton Woods Reform Moment: Let Us Look Seriously at The Clearing Union,” 2021.

There have been a number of similar proposals at the regional level, see Kregel, The Clearing Union Principle as the Basis for Regional Financial Arrangements in Developing Countries, *Debt Vulnerabilities in Developing Countries: A New Debt Trap? Volume II: Policy Options and Tools*, Geneva, UNCTAD, 2017.

¹⁷ Hjalmar Schacht, *Gold for Europe: new plan for European financial rehabilitation*, London, Duckworth, 1950.

proposed that the account, via a German issuing bank or institution could issue a gold backed currency, the “Thaler”, which would equal one US dollar. (and have a fixed rate relative to the Deutschmark) to be lent German enterprises to support reconstruction. The granting of Thaler credits would be what was at the time called “directed” finance, that is its allocation would be determined by the German issuing bank to support reconstruction, in particular focusing on the development of export industries to restore German balance of payments equilibrium. The foreign exchange earnings of the finance exporting enterprises would be available to repay the Thaler loans. Over the expected reconstruction period of thirty years the financed enterprises would be expected to generate the export earnings required to compensate the US for the gold credits advanced to the BIS.

Schacht had two additional objectives in this proposal aside from providing a stable source of additional source of reconstruction finance. He argued that if the repayment to the US was in US dollars earned from the exports the gold had financed, the gold would remain in Germany and its European trade partners, thus providing the basis for stability of the European financial system. The second was that since the gold in Fort Knox did not generate a return, the US would not have to charge interest on the transfer of gold to the BIS, but the Thaler loans would have a positive borrowing rate, which would be part of the directed lending decision but more importantly generate a source of revenue which could provide additional financial resources for development.

While these are attractive aspects of such a proposition, the important element is the fact that the use of gold would provide a costless source of financing to developing countries that would not have a direct or immediate impact on domestic financial policy for the donor country or any fiscal costs.

Estimates of the top national gold holdings are as follows:¹⁸

1. United States 8,133.5 MT
2. Germany 3,358.5 MT
3. Italy 2,451.84 MT
4. France 2,436.5 MT
5. Russia 2,301.64 MT
6. China 1,948.31 MT
7. Switzerland 1,040 MT
8. Japan 845.97 MT
9. India 760.4 MT
10. Netherlands 612.5 MT
- *11. International Monetary Fund 2,814 MT

¹⁸ <https://investingnews.com/daily/resource-investing/precious-metals-investing/gold-investing/top-central-bank-gold-holdings/accessed> 12/11/22

A rough estimate is about 21.7 metric tons which at the bullion price as of December 2022 of approximately \$57.5 million per metric ton gives a potential Climate fund of about \$1,247,336,000,000.00 (excluding China, India and Russia). As a general measure this is close to current estimates of current requirements. But the magnitude is not important, as stated above, financing is not the problem, the difficulty is in offsetting the distributional problem of costs between developed and developing countries and finding a financial mechanism in which developing countries are not driven to private financial market finance and increasing debt burdens.

How might one translate this proposal to deal with the current problem of reconstructing the climatic damage and remediation for developing countries. We could create a Sustainable Climate Bank with the developed countries contributing their accumulated gold holdings to the Bank. Developing countries could have accounts in the Bank which they could use to fund reparation of climate loss and climate remediation against approval by the Board of the Bank denominated in "Climate Thalers" (readily convertible into gold at the Bank). The aim of the funding would not be to produce financing of investments to produce export credits, but rather climate amelioration measures in developing countries. The Climate Thaler funding for developing countries would generate climate credits which could be offset against their earmarked gold accounts in the Bank. The gold transfers would not be repaid in gold or dollar claims, but they would generate climate improving expenditure credits without direct real costs to the developing countries and improvements in conditions which would be shared globally.

Such a program would respond to two needs – it would allow developing countries to meet their climate costs without increasing debt service commitments without having to reduce domestic incomes to generate the real transfers required by debt service. Second they would provide the equivalent of debt remission which would not require a reduction in developed countries income since they would be paid from the non-remunerative gold holdings. In addition these changes in financing could occur without impact on the domestic monetary policies of the developed countries since these are no longer predicated on gold back to currency, as well as being independent of the domestic monetary policy of developing countries. There would be changes in domestic fiscal positions, but these could be easily dealt with by changing the accounting conventions for government expenditures in national accounts. For example, in the past, Germany has allowed special treatment for investment expenditures via the golden rule, and a number of economists, including Keynes, have proposed a special form of fiscal accounting to distinguish current from capital account expenditures. Expenditures to ensure a sustainable environmental future would seem to qualify as part of long term capital account expenditures, although it is not clear how they would be calculated.