Macroeconomics and Children

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1. What is macroeconomics all about? Why is it important for children?

Macroeconomics is a branch of economics that studies, first of all, under non-crisis conditions, the relationship between policy decisions concerning the interest rate, money supply, fiscal policy, international tariffs and so on, on the one side, and the evolution of macro aggregates such as GDP, employment, household incomes, investments, inflation, the balance of payments, etc. on the other. It is younger than classical economics and micro economics, but it gained enormous importance following the work of John Maynard Keynes and the publication in 1936 of '*The General Theory of Employment, Interest and Money'*. In particular, the analysis of Keynes provided an answer (that is, a lack of aggregate demand) to the causes of the prolonged stagnation of the Western economies after the devastating Great Depression of 1929-36 when – despite the availability of ample reserves of idle labor and capital – most economies were stagnating. Keynesian economics introduced many new concepts (such as 'propensity to consume', 'aggregate demand', 'consumption multiplier' 'liquidity preference' and so on that are since then part of the vocabulary of economists and policy makers. It also led to the codification in 1947 of a System of National Accounts (SNA) reflecting Keynesian economic concepts thanks to the publication, under the leadership of Richard Stone, an associate of Keynes, of a Report by the UN Sub-Committee on National Income Statistics.

Keynesian macroeconomics dominated policy formulation until the early-mid 1970s, a period of rapid and balanced growth, and occupies center-stage also today, as shown by the introduction of expansionary fiscal and monetary measures in Europe in response to the Covid 19 pandemic.

At the end of the 1970s, however, Keynesian macroeconomics started getting challenged by monetary macroeconomics following a rise of the rate of inflation in the aftermath of the Vietnam War and the huge trade surpluses recorded by the European and Japanese economies against the USA. These changes raised massively the supply of US dollars to the global economy and together with the two oil shocks of 1973 and 1978 raised sharply to the US rate of inflation that in 1981 reached 20 percent. Keynesian fine-tuning measures (such as the manipulation of public spending and tax rates) could not in fact easily control the inflation due to such structural factors. Monetary policy started also to be preferred to fiscal policy for doctrinal reasons. These were the years of President Regan and Prime Minister Thatcher and of the rise of the '*New Political Economy*' doctrine of 'neoliberalism', that aimed at reducing the role of the State in the economy. Political

[1] To appear as a chapter of the 2023 Edward Edgar' *Handbook on Child Poverty and Inequality. Practical Guide on Concepts, Measures, and Policies*' edited by Enrique de la Monica (Unicef Headquarters, New York) and Alberto Minujin (New School for Social Research, New York).

economic mistakes by some policy makers, such as a continuous expansion of fiscal expenditure during election years, regardless of whether the country's productive capacity was already fully utilized, compounded in some cases the inflationary problem.

The birth of the WTO in 1995 and the liberalization of world trade, together with the opening in many countries to FDI and international portfolio flows then led to the birth of the 'open-economy macroeconomics' and – depending on the structure of the economies considered – to results different from those obtainable in nations operating under a broadly closed economy. Fiscal and monetary stimuli to increase domestic aggregate demand could in fact leak out and cause an increase in import rather than in domestic output, GDP and employment. Under these conditions, it became necessary paying much more attention to the choice of the exchange rate, trade policies, and degree of openness of the capital account. Wrong choices in these areas may in fact lead to an increase in the number and gravity of financial crises, that in turn affect the real economy and the wellbeing of families and children (see Part III and Figure 2).

Secondly, macroeconomics studies the impact on '*economic outcomes'*(GDP growth, incomes per capita, private consumption, inflation, unemployment, wages, foreign debt, and so on) of external shocks (such as global recessions caused, for instance, by a spike in key commodity prices, ever more common financial crises, large increases in interest rates by key countries (as happened over 1982-1984 when, to fight inflation, the US Fed raised the policy rate by 10 points – causing in this way a devastating domestic and international recession - or due to internal shocks and policy mistakes (Figure 2). Changes in economic outcomes then almost invariably trigger adverse change in '*social outcomes*' (public social spending, poverty, inequality, child mortality and malnutrition, school abandonment, and so on) – see Part IV and Figure 3. With the growing importance of the Human Development Approach (Sen 1993) social outcomes became more important as underscored by the introduction of various operational and monitorable social plans (e.g. Unicef's Action Plans for Children' for the 1980s and 1990s, the MDGs for 2000-2015, and the SDGs for 2015-2030), that have influenced considerably the study of the 'social impact of macroeconomics'. Already in the early 1980s, Unicef published a study on '*The Impact of the world Recession* [of 1982-44] *on Children'* (Jolly and Cornia, 1984) that attempted to trace the changes in child wellbeing following the impact of the crisis triggered by the steep rise in US interest rare mentioned above.

Thirdly, during period of crisis, recessions and financial instability, macroeconomics becomes even more important, as it inspires the' structural adjustment measures' that have to be introduced to bring back the economy to its long-run path of growth and social improvement. The international organization institutionally in charge of designing such structural adjustment measures (also dubbed 'stabilization measures') and of mobilizing the supporting credits for their implementation has been and remains the IMF, at times in cooperation with the World Bank and the Regional Development Banks[2]. Especially in the early-mid 1980s, the package of IMF-World Bank policies aimed at the stabilization of

[2] Between 1980 and 2000, the IMF, initiated every year, in collaboration with national governments, between 126 and 150 high-conditionality programs of macroeconomic stabilization and structural adjustment (Barro and Lee, 2002).

macroeconomic aggregates and reducing the role of the State in the economy have been referred to in the literature as the '*Washington Consensus'* as these policies were jointly agreed by important economic institutions based in Washington – such as the IMF, World Bank and US Treasury. The measures it recommended were traditionally inspired by short term monetary economics and the New Political Economy approach, and have been referred to in the literature as 'mainstream' or 'orthodox adjustment measures[3]. Such measures have been the object of widespread criticism because of the unrealistic hypotheses undergirding their models, especially for the developing and emerging economies, and for the recessionary and dis-equalizing approach they implicitly promoted. A heated controversy has thus characterized the theoretical debate about the nature of adjustment of the last forty years, following, *inter alia*. the publication of the influential Unicef-sponsored study on '*Adjustment with a Human Face: Protecting the Vulnerable and Promoting Growth*', (Cornia, Jolly and Stewart, 1987), the WIDER-sponsored important study '*Variety of Stabilization Experiences: Towards Sensible Macroeconomics in the Third World'* (Taylor 1988), the work of Dutt and Ros (2003) and various publications from ECLAC. These and other analyses have contributed laying the foundations of a '*structuralist macroeconomic'*, that is especially suitable for developing countries characterized by ic strong rigidities, long response lags, the existence of a large non monetized sector of the economy, and other fundamental characteristics that modify the way advanced economies usually adjust (though, also in this case, with results often at variance with the predictions of the theoretical MABOP model that inspires them). A normal assumption of the structuralist approach is that the price mechanism often fails in its allocative function, Such work has been deepened for countries with institutions less developed than in advanced countries by the work of Jha (2003), Cornia (2020) and several others.

It must be noted also that several countries (including Argentina, Brazil, and Peru, as well as Israel, Turkey and Uzbekistan), experimented in the 1980s and 1990s with '*heterodox adjustment policies*' inspired by Keynesian-structuralist theory or introducing administrative approaches such as price controls and multiple exchange rates. All these (more expansionary) approaches generated satisfactory results over the first couple of years. The first three failed however – for political economy reasons - to stabilize public spending and inflation in periods leading to elections, despite having already reached full capacity utilization and experienced some inflationary pressures (Dornbush and Edwards,1991). In this case, the heterodox policies contributed to the worsening of the social impact of the initial shock. The second three managed instead to register positive results also over the medium-long term.

During the last decade or so, a number of key IMF staff has recognized the limitations of the Fund's approach and, in particular, its recessionary bias (Blanchard and Leigh 2013),

[3] The ten policy measures part of the Washington Consensus included: fiscal cuts, a sectoral reallocation of public spending, tax reform, financial liberalization, unified and competitive exchange rate, free trade, liberalization of Foreign Direct Investments, privatization of state enterprises, price deregulation, and secure private property rights (Rodrik 2006). Given its unsatisfactory results, the Washington Consensus evolved into its 'Augmented' version that included also ten additional measures of mainly institutional and social nature (*ibid)*

while others have voiced a critical evaluation of the standard IMF doctrine and raised the question of whether neoliberalism had been oversold (Ostry et al. 2016). In addition, with the adoption of the SDGs, the IMF-supported adjustment measures have now to examine compulsorily their potential impact on poverty, inequality and the environment. Finally, with the outbreak of Covid-19 over 2020-22, the IMF has quickly made available to 90 developing countries huge low-conditionality *Rapid Financial Instruments* while it issued, with the support of the majority of the IMF member states, and regardless of the USA opposition, 650 billions of Special Drawing Rights that were allocated to all countries to strengthen their balance of payments during this difficult period.

II. To understand the impact of macro crises and policies on children one needs to know the immediate determinants of their wellbeing

These include:

(i) Family and community structure and stability. Research from developed and developing countries suggests that the family structure and stability have important consequences for child wellbeing. Craigie et al (2010) tested the association between maternal union type and stability and the children's mortality risk in several developing regions. Their findings show that registered unions exhibit lower child mortality than consensual ones, while children born to single mothers face an even higher risk of mortality. Children of regular monogamous unions experienced the lowest health risk. The children from polygamous unions characterized by competitive relations between co-wives, did not fare well. Another feature that affects the level of child mortality and their overall wellbeing is the stability of the union and of the community in which the child lives. Available World Fertility Surveys indicate that the risk of child death and poor performance in other areas varies directly with the instability of the union in which s/he is born, especially in Africa and Latin America where union transitions are common.

(ii) Level of education of the mother and social norms. Following the pioneering work of Caldwell (1979), it is now generally accepted that - *ceteris paribus* – the children of educated mothers experience a lower risk of mortality, malnutrition and poor health than those of uneducated mothers. The mortality differential is particularly marked between mother with no or only primary education and mothers with completed secondary education and above. In extreme cases (as in *Matlab Thana* of Bangladesh in the early 1980s), the mortality differential between children of mothers with no education and that of mothers with at least seven years of education was as high as 500 percent. Mothers are the frontline health provider of the family, and literate mothers are also able to argue with competence with official health providers, manage efficiently the resources of the family, and limit their fertility rate (Table 1).

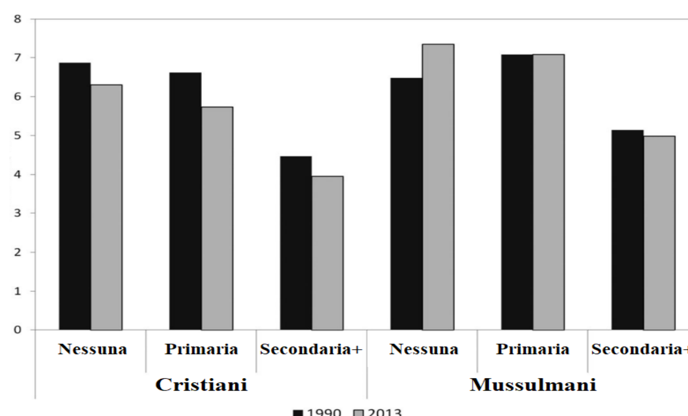
Table 1. Child mortality, malnutrition and TFR (Total Fertility Rate) by level of education of the mother, Azerbaijan, 2008.

Level of education of the mother	Under-5 mortality rate (per 1000)	Low birth weight (%)	Child growth interruption %)	Incidence of child malnutrition (%)	Total Fertility Rate (TFR)
Less than Secondary	74	12,6	14,7	3,2	2,4
Secondary	57	10,5	13,9	1,8	2,0
Technical Education	45	6,5	5,5	2,9	1,7
Higher education	45	2,9	3,7	0,7	2,0

Source: Unicef Baku (2008), "Budget Investments in Health and Education of Azerbaijani Children". Mimeo.

Though all main religions oppose the introduction of restrictions to population growth, it is not uncommon to observe differences in TFR among different religious groups living in the same country. Some of the best known cases are those of India, (where the Muslim minority has a higher TFR than the Induist majority), and Nigeria (where the Muslim minority has higher TFR than the Christian majority). In Nigeria[4] the TFR varies also within the Muslim community: the TFR is, in fact, higher in the Northern region where the *sharia law,* polygamy and the marginalization of women is prevalent. Figure 1 shows that, also for the same level of education, the TFR is higher among the Muslims and that the differential has increased over time

Figure 1. TFR in Nigeria by level of education and religion, 1990 and 2013.



Fonte: Izugbara and Ezeh, (2010), *op. cit.*

(iii) Household and community resources per capita. They are a main determinant of child wellbeing. Except for the rentier class, they depend on the earned household income per capita in cash and kind. Formal and informal wages tend to be an important part of it, but so is the money earned from the sale of agricultural products and services. Income subsidies (net of direct and indirect taxes), like the cash transfers to the families, that are now estimated to cover more than 900 million people worldwide (Hanlon et al 2010), are now

playing an increasing role in raising the monetary resources of the household and *ceteris paribus* of the child. But, the impact the resources targeted to each family member, especially children, depend a lot on the norms regulating the distribution of income within the family. This varies across cultures but – especially in poor societies – they normally favor the breadwinner. In farming societies, the male adults, who generally perform the heaviest tasks, are the most favored in the distribution of food, followed by working females, the elderly and, only at the end, children. There may be also competition among close-birth siblings as well as children of polygamous co-wives. These arrangements may worsen during the lean season, and periods of economic instability and famines.

Particularly in rural areas, or in closely-knit neighbourhood associations (as the Uzbek *Mahallas*), temporary shocks (like drought, disease and loss of job) may be compensated by the support provided by the community in the form of free labour, materials and food loans. In some countries, such *informal social assistance* is often more efficient than the formal one, as it suffers from lower selection errors.

(iv) Quality of the home, family assets and survival strategies. In addition to the current income in cash and kind, the stock of assets belonging to the family is another important determinant of the wellbeing of children. To start with, the physical characteristics of the house where the child lives affect the incidence of several diseases. A hard floor and an all-whether roof reduce several health risks, while the access to in-house piped fresh water and sanitation reduce the incidence of diarrhea, a major child killer. In turn, a non-polluting stove and fuel cut the risk of contracting respiratory diseases. And a sanitary garbage disposal reduces in turn the possibility of animal infestation and contracting infectious diseases.

Secondly, monetary and other forms of wealth - such as jewels, land, bullocks and other animals, and means of transportation constitute a buffer that can support the health, education and nutrition of children during recessions and difficult periods. In many cases, such assets may in fact be sold with limited losses. Such survival strategies would be particularly efficient if they do not entail selling assets that constitute means of production, like bullocks or agricultural machines in the countryside or transport equipment for trading families in urban areas.

Thirdly, the possibility of relying on some of the following 'efficient survival strategies' may substantially reduce the impact of crises and macroeconomic stabilization on children. To start with, whenever possible, access to insurance and consumer credit at reasonable rates can protect the wellbeing of children during short term crises. This is however, seldom the case for poor families unable to provide credit guarantees.

Especially for low-middle class families, child nutrition and health may be preserved by substituting expensive consumer goods with cheaper ones. The literature, for instance, showed that during the difficult transition to the market economy of Czechoslovakia, Hungary and Poland there was only a very limited impact on child nutrition, despite a large contraction of incomes and in the value of food purchases, as these countries had a high

initial level of consumption and substituted expansive calories (from meat and fish) with those of equally nutritious content but less expensive grain products (Cornia, 1994).

The possibility of migrating at low cost to nearby countries unaffected by crises, and to remit home money or food is also an option to support family consumption per capita. In much of Africa, the traditional yearly circular migration to close-by countries often intensifies in periods of crisis. And so do, changes in family arrangements, like placing children with relatives living in less affected areas. Finally, an option available to some cash-crop farmers facing crises is a 'withdrawal into subsistence', by shifting mainly to the direct cultivation of food-crops and the satisfaction of other essential needs.

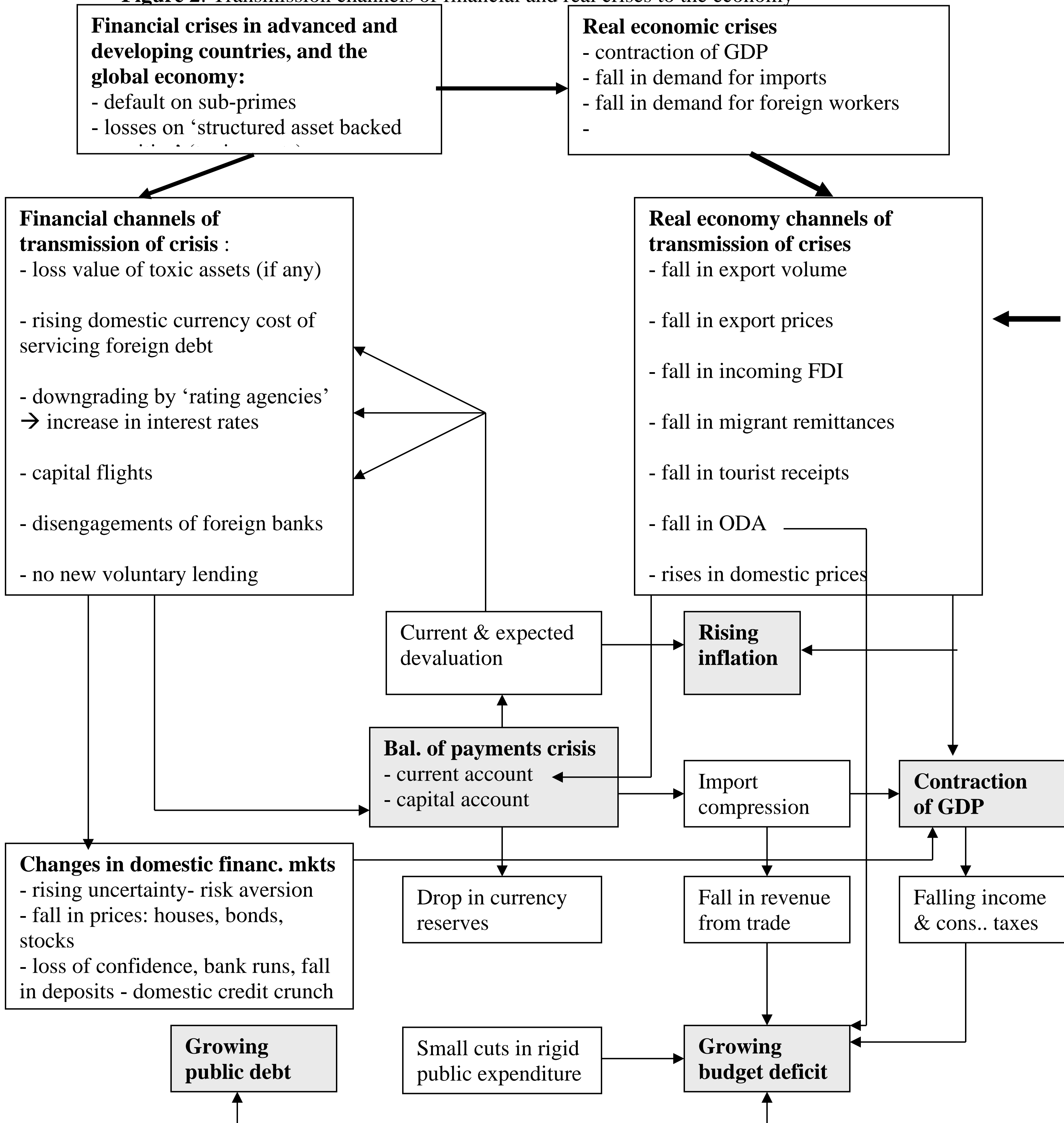
(v) Inflation and price of basic goods. High inflation and particularly the high prices of basic items (food, fuel, medicines and shelter) reduce the real value of monetary incomes and so affect the wellbeing of the poor and their children. Basically, the demand for such items is rigid, and once the substitution of expensive by cheaper alternatives mentioned above is exhausted, a rise in the prices of basic items first reduces the income available for non-essentials, and then the quantities of basic items consumed by the poor. In low-income countries, during periods of rising inflation, the rigidity of the demand for food and other basic items makes that their prices rise faster than that of non-basic items with an elastic demand. This is one of the reasons why high inflation tends to affect more the poor who spend a higher proportion of their incomes than other social classes on food.

(6) Public expenditure on health, education, and nutrition. The wellbeing of families and children depends finally on the public expenditure per capita on public goods such as health care, especially primary health care, nutrition, fresh water supply, basic education, and other essential services. The policy approach followed to the financing of such goods and services may affect – *ceteris paribus* – their fruition, even with unchanged public spending per capita. This has often been the case in the 1990s and 2000s with the introduction or increase in nominal and substantial 'user fees'. Changes in the regional and urban-rural allocation of public social spending may also affect child welfare. Likewise, a shift of their financing from the central government to (poorer) regional authorities, or in the level of service may also affect their wellbeing.

III. Pathways of transmission of crises to the national economy

During the last 50 years the economy of several developing and developed countries has been affected by a variety of *real* economy crises caused by natural disasters, rises in the prices of primary commodities, like the oil price rises of 1973 and 1978 and the gas price rise of 2022, rises in interest rates in key economies (like the USA one of 1982-84 mentioned above), and the Covid Pandemic of 2019-2022. Macroeconomic crises can be determined also by domestic shocks and policy mistakes (see Figure 2).

Figure 2: Transmission channels of financial and real crises to the economy



Following the domestic and international liberalization of financial transactions introduced during the 1980s and 1990s, many countries were also hit by a growing series of *financial* crises. These include, for instance the developing countries' debt crisis of 1982, the 1994-5 Tequila default, the Thai-Asian crisis of 1997, the Ruble crisis of 1999, Argentina's default of 2001-2, the Lehman Brothers collapse of 2008, the Euro crisis of 2010-11, and so on. Despite their different origins, the financial crises always produce 'real effects' that affect also the determinants of child wellbeing (see Table 2 for the impact of GDP). These real effects, in turn, often trigger the introduction of macroeconomic structural ajustement policies. Figure 2 illustrates the complex set of interactions following the onset of a financial crisis (left side) or of a real economy crisis (right side).

Figure 2 iillustrates in diagrammatic form the way financial and real crises affect the indicators of instability (boxes highlighted in grey), i.e., a GDP contraction, a rise in inflation, growing deficits of the balance of payments and state budget, and rising public debt. These are the classical symptoms of a macroeconomic crisis that requires the introduction of adjustment measures. The impact is particularly evident in terms of balance of payments crisis and GDP decline. Table 2 illustrates, for instance, the severe contraction of GDP due to the effects of the Lehman Brothers crisis of 2008-9.

Table 2. Average growth of real GDP, 2007-2010 in the economies in transition

	2007	2008	2009	2010
Central Europe & Baltic States	6.2	3.4	-2.9	0.2
South Eastern Europe	6.3	6.6	-3.2	0.4
Eastern Europe and the Caucasus	9.9	5.0	-6.2	1.3
Russian Federation	8.1	5.6	-7.5	2.5
Central Asia	9.2	5.0	0.4	3.0
All transition countries	6.9	4.2	-5.2	1.4

Source: EBRD http://www.ebrd.com/new/pressrel/2009/090507gdp.pdf

IV. Impact on families and communities

The nationwide shocks described in the prior section affect, in turn, the resources available to households and the state budget, including for the care of children, with recurrent effects for the majority of them. Such effects can be briefly summarized as follows :

(i) Falling household incomes. Household income from wages, salaries, self-employment incomes, in kind production, and – to a lesser extent – social transfers from the state are likely to fall in real terms. With the contraction of GDP and the credit crunch that hits small and medium firms, the demand for labor falls, while unemployment and underemployment rise together with the recourse to compulsory leave without pay, a short working week, layouts and greater job informalization. Unskilled workers in small-medium firms, construction workers, and informal sector workers are generally the first to be affected, while skilled workers and subsistence farmers partially integrated into the market economy may be less penalized. Workers in small-medium factories in mono-industrial towns are always particularly affected. In case of large shocks – as during the transition of the 1990s in the Former Soviet Union, the crisis affected no less than 40-50% of the workforce,

especially the young and those with secondary education or less, especially those working in the mono-industrial towns of the Far East.

Besides by a rise in unemployment, family incomes may be affected by a drop in real wages (i.e. nominal wages corrected for inflation), pensions and un-indexed social transfers. Such reduction in real earnings and transfers may take many forms, including cuts in their nominal values, partial wage payments, accumulation of wage arrears, and limited indexation to inflation.

Delays in the payment of social transfers are also common. To deal with this problem, some governments have announced measures to support them. At the same time, many countries have introduced 'targeted transfers' to the poor and disadvantaged including CT and CCT, public work schemes, and targeted non- or little-conditional cash transfers like Brazil's famous *Bolsa Familia* or India's National Employment Guarantee Act, or NREGA (for a general discussion of this point, see Hanlon et al. (2010). Yet, as observed in various parts of the world, it is possible that the cuts (or lower increases) in traditional institutionalized social transfers exceed by 2-3 times the value of newly introduced targeted transfers (that usually absorb 0.4-0.8% of GDP, and at times, less).

(ii) Erosion of the real value of household's assets. As noted, the ability to sustain an adequate level of consumption for the families and their children depends also on their ability to sell their assets. However, their real value may be reduced by the rise in the rate of inflation, which is quite common during macro crises. The literature shows that such phenomenon is particularly severe among the poor who are less able to shift their moneys to inflation shelters. Secondly, the value of housing (that represents the largest share of total family assets) falls sharply as a result of declining demand. Thirdly, the poorest people (including those living in rural areas and small town), are affected by the erosion in the value of their livestock, land plots, and consumer durables due to a rise in the number of distress sales and falling demand.

(iii) changes in income distribution. Economic theory and the historical record of rises in inequality during recessions and crises suggests that where unemployment, underemployment and job informalization rise, income inequality soars as well. This is due to the fact that unskilled and semiskilled workers are affected most by the crisis, and that social security systems in most developing and even developed regions do not provide a universal coverage. In addition, where the indexation of wages, pensions and benefits is incomplete or infrequent, the real incomes of the poor tend to decline. This is particularly true for food inflation which hits most the real income of the poor (see above). But the middle class may be affected as well. Finally, the recapitalisation and bailout of banks is highly regressive, as tax money is used to bail out the very rich. World Bank studies on the cost of a 3-4 years bailing out banks in the 1990s indicate that such cost ranged between 6 percent of GDP in Sweden (1991) and 55 percent in Argentina (1980-2).

(iv) exhaustion of efficient survival strategies and falling household consumption. Confronted with declines in money incomes and a likely worsening of income inequality, households try to sustain their consumption by reducing their savings, selling their assets,

expanding family labour supply, and running into debt. Except for a smallish number of poor families, even a 10 % decline in overall consumption reduces the purchase of non-essentials without affecting the access to decent housing, heating, education, nutrition and other essentials.

However, the margins to adjust to a fall in income are limited in countries where a large share of the population (up to 60%) already lives in poverty. Many households do not have assets, savings, extra family labour to offer on the job market, and ability to borrow. In addition, their 'food share' is already 50-70 percent, while they exhibit a high number of children per adult. This means that a 10% fall in family incomes may result in a 6-7% percent drop in food expenditure, inability to pay for drugs and school fees, risk of family breakdown and child abandonment.

Evidence of the decline in household consumption can be gathered from different indirect indicators, such as delays in paying utility bills, rise in the number of people bringing things to pawn shops and in demands for social assistance, and placing children with relatives or in institutions.

(v) Inflation, and the price of food, drugs, childcare and education. In several instances the Consumer Price Index (CPI) rises sharply. Because of the rigid demand for food, fuel, medicines, utilities and other essential items, higher increases are recorded for food, fuel, utilities and in some countries, education. In addition, countries which are net importers of food and fuel are threatened by the depletion of their foreign currency reserves, and difficulties in borrowing internationally.

(vi) a fall in public social expenditure and an increase in household's out of pocket expenditures. In times of crisis, public ssocial spending may be affected as tax revenue falls, the domestic currency cost of servicing the public debt rises due to devaluation, and the spread on the reference interest rate rises. In addition, cuts in the overall level of public expenditure/GDP have been frequently asked by the IMF in the past as one of the conditions for providing new loans. Only countries with large 'Reserve or Stabilization Funds' may be able to sustain public social expenditure at pre-crisis level. In medium-large federal countries the deficits of local governments may rise faster, as they generally rely on a narrower tax base and diminishing central government transfers. This can represent a major risk for the provision of basic health, education and social protection in the many countries where such services are the responsibility of local authorities.

The overall cuts are seldom allocated equitably among chapters of public expenditure. In the past, the social sector has often been cut more than proportionately. As noted, the peculiarity of recent financial crises is that most governments allocate large amounts of tax-payers money to bail out banks and politically influential industries. This approach reduces the 'fiscal space' for health, education, nutrition and transfers. Within each sector, expenditure on new investment, maintenance, supervision and inputs (books, medicines, feeding programs) are cut the most, so as to preserve wages. As a result, water, sewage and heating systems often fall in disrepair, while hospital have no medicines, teachers few teaching aids and so on, reducing in this way the efficiency of social services.

(vii) A decline in the time allocated by the family and community members to the care and supervision of children. The time available to family adults, women and the elderly for food preparation, cleaning, and the care and supervision of children and sick people is an important resource for health and nutrition, to improve school performance and minimize the risk of child accident and injury. Yet, during crises, the time dedicated by the mother to the care of small children may be affected by the fall in earnings of the traditional household head and other adults engaged in market production. This generally leads to an increase in the time dedicated by women and adolescents to market production, and a reduction in the time assigned to the care of the family. Adolescents may also drop out of school to substitute for mothers and other adults now involved in market production.

While the increased participation of women, elderly workers and adolescents to the labour force may partially offset the income loss of the head of household, their simultaneous absence from home can substantially reduce the time dedicated to child care, nutrition, and supervision. All this can have an adverse effect on the frequency of feeding, the risk of injury and accidental death of the child. Increasing claims on the time of mothers, coupled with declining incomes and cuts in government expenditure on education and child care also have negative effects on school performance, the drop-out rate, exploitative child labour, child abandonment and child institutionalization.

(viii) Weakening family-community structure and worsening child socialisation, Prolonged crises may also weaken community solidarity, especially when the economic shock is covariant (rather than idiosyncratic). Richer neighbours will find more difficult to spare resources for the poorer members of their community. There is also evidence that when things get rough, there is a rise in the share of children growing up in incomplete or mono-parental families in which one or both parents are absent. Children may also be placed in public institutions such as orphanages, with foster parents, under the tutelage of local guardians, with relatives, or stay by themselves. These children face problems of emotional and cognitive development, high risk of accidents, unsatisfactory school performance, youth deviance and psychosocial mal-adaptation. Despite a likely total drop in births, it is not uncommon to observe a rise in the number of problem families and in the share of births to under-age and/or unmarried mothers and – with some time lag - in the number of children at risk of abandonment, institutionalization, poverty, and orphanhood;

(ix) Rising uncertainty, stress and family violence. An often ignored phenomenon which has characterized, for instance, the transitional crisis of the 1990s in the former socialist countries of Eastern European and the Former Soviet Union, concerns the stress generated by growing (and historically unexpected) unemployment, uncertainty, inequality, poverty and instability. Many reports indicate that during period of crisis and macroeconomic adjustment family tensions and violence, alcoholism and stress rise among heads of household facing unemployment, loss in social status, and a difficult job-search related migration. All this leads to acute stress and rising mortality among adults due to cardiovascular and violent causes, as well as to child abandonment and school dropout.

V. Impact on children

The immediate determinants of child wellbeing can be separated in two main groups. The first includes '*stock variables'* (in blue in Figure 3) i.e. variables that change slowly over time as they depend on their accumulation over several years and social norms. These include: community and family characteristics (such as social capital and level of parental education); existing social infrastructure (schools, hospitals, and so on); KNAP (knowledge, attitude and practices), and religious norms that affect reproductive behaviour, nutrition, health and child care. These variables generally change little during crises of 1-3 years, and can therefore offer an important protection to children in difficult moments. The second group includes '*flow variables'* (in red in Figure 3) that can show large variations from one year to the next, or even from one quarter to the next, and can thus affect fairly rapidly child well-being (in grey in Figure 3).

Child vulnerabilities will vary according to the national contexts, culture, initial level of GDP per capita, income distribution, and strength of traditional institutions. The impact will be greatest in the worst affected economies and where government responses are weak. Figure 3 illustrates in a diagrammatic form the components of child well-being potentially affected (in grey) and the link to their immediate determinants (in red). The narrative about the chain of events affecting the families and public institutions affected by a crisis and erroneous macroeconomic adjustment policies was discussed in Part IV. Here, only the headings of possible deteriorations are summarized. Such deteriorations may include:

- a rise in child poverty rate. i.e. the proportion of children with an income per capita of less than an agreed minimum threshold,

- rising child malnutrition,

- reduced access to health care, worsening child mortality and rising health differentials among children belonging to different social strata,

- rising school drop-outs, falling and/increasingly unequal access to education,

- rising child labour,

- an erosion of the time dedicated by family adults and communities to children, and rising child injury and disability,

- family instability and rising problems of child-youth protection and socialization,

- diminishing access to child care institutions,

- a growing number of abandoned street children and youth problems.

VI. A macroeconomic approach that minimizes the impact on children

Except for epidemics and wars, crises seldom come out of the blue. A regular *ex-ante* trends monitoring and analyses help identifying in advance the symptoms of problems that are at the beginning slowly developing. This helps introducing prudential and regulatory measures that will reduce the impact of crises on the economy, families and – in the end – children.

(I) Policies to be introduced before a crisis emerges. They concern both the international and the national economy. Among the first, one may consider a limitation of the foreign debt exposure of a country towards the rest of the world. The enormous development of the international financial market – where money can be borrowed at much lower rates than on the domestic market – has created the false illusion that the financing of economic growth and human development does not require to raise the domestic saving rate. From the mid-1990s, there has been a remarkable *de facto* opening of the capital account that has – however – pushed upward astronomically the foreign debt of many developing and emerging countries. Under crisis situations, this leads to an increase in the interest rate to be paid to foreign lenders. The same happens – in a different way - for portfolio flows and the FDI. In addition, as already noted, during crises the exchange rate falls and in this way, it increases the domestic currency cost of the servicing the foreign debt. Such cost falls almost invariably on the state budget, even in case of privately-contracted debt, depleting in this way public resources that could be used for economic and social purposes, that have been shown to promote also long-term growth (Cornia et al. 1987). As an extreme measure, a country may choose to close (partially or totally) he capital account, introduce 'speed bumps' to slow the entry of speculative capitals, and subject the entry of FDI to licence, as done in Chile, Malaysia, China and Vietnam among other countries.

Stricter prudential norms have to regulate also the operations of the domestic financial sector that, as noted in Part IV, has absorbed enormous amounts of state money for the recapitalization of failed domestic banks, depriving also in this case the real economy, families and children of precious resources. The econometric analysis of Koujanou-Goldberg and Pavcnik (2007) on the impact of liberalization, privatization and globalization during the 1980s and 1990s found that the international and domestic financial liberalization were the first two causes of the rise of income inequality and poverty during that period.

In developing countries exporting important primary commodities subject to substantial price fluctuations (such as oil and metals), it is also important to introduce *ex-ante* 'Stabilization Funds' that – when prices are high - set aside the revenue exceeding a pre-determined long term sustainable reference level. Such countercyclical monetary policy avoids inflationary pressures during years of *bonanza,* while it allows to reinject the moneys set aside into the public budget in the years of low commodity prices and falling revenue generation. Chile, Mauritius, Norway and other countries have experimented successfully with this approach. Finally, several developing countries' macro problems have historically depended from low levels of taxation (especially the personal income tax and other forms of direct taxation) due to the resistance of the elites and the slow

development of the tax administration. Until 2003, the average tax/GDP ratio in Latin America was about 15 percent, well below the international norm calculated econometrically, too low to cover all public expenditures, and a main cause of the accumulation of foreign debt by governments under pressure to increase public spending in periods leading to political elections. In fact, low tax/GDP ratios have been for long a '*Damocle's sword*' hanging on the macro-economy of many governments of the region. With the '*Left Turn*' (the arrival to power of centre-left regimes over 2002-2013), in most Latin America there was a steady increase (3 points of GDP on average, with peaks of 6-7 points in key countries) that permitted to strengthen the public budget and reduce state borrowing and inflation (Cornia, 2014). Interestingly enough, such approach was sustained also during the '*Half Right Turn*' of the subsequent 6-7 years.

(ii) Economic policies to be introduced once a macroeconomic crisis has erupted. The option of 'No adjustment' is non-viable, as macroeconomic inertia may lead over the medium term to greater problems than those recorded initially. But the 'traditional contractionary IMF package' is not an option either. In an often cited paper, Adam and Bevan (2001) noted that large budgetary cuts (5-8% of GDP a year) tend to aggravate the recession induced by a crisis, by causing a drop in GDP and fiscal revenue that leads to a new broadening of the public deficit and to the need of repeated cuts over several years. Instead of such kind of '*illusory adjustment'* one may adopt a more gradual approach entailing cuts of 1-2 percent of GDP a year, accompanied by a greater financing of the deficit supported by efforts at tax collection and request for international aid. While progressive taxes ought to be increased, in several countries, substantial user fees ought to be reduced as – with such measure – several families would be excluded from the fruition of basic public goods. In all these areas, the public authorities should try to re-prioritize public spending, increase its categorical (but not means tested) targeting, reduce costs and increase coverage. A similar gradual approach ought to be followed in the field of disinflation as there is no clear evidence that bringing inflation below 40 percent does increase the rate of growth of GDP. The evidence shows that this seems to be the case in both fairly closed and fairly opened economies

(iii) Social policies to be introduced once a crisis has emerged. The type of social policies to be introduced to support families and children during a macroeconomic adjustment vary considerably depending on the structure of the economy and labour market, the level of income per capita, the 'fiscal space' of the government, and the efficiency of public institutions. In more developed countries, social policy is based, to a large extent, on labour market policies (unemployment compensation, labour retraining, employment subsidies, increases in minimum wages (especially if these are low to start with). These policies aim at sustaining the labour income of able-bodied citizens and at increasing their human capital. Over the 2000s, for instance, minimum wages were raised in practically all Latin America. In contrast, as already mentioned, the cash transfers to people unable to earn an income (children, pensioners, disabled) has become increasingly important during the last two decades, including because of their relatively low aggregate cost and progressive incidence (CEPAL 2007, Hanlon et al 2010).

A second set of social policies, often applied in low-income countries focuses at ensuring a minimum level of nutrition during crises. This may be done, as in India's Public Distribution System, by issuing to the poor food cards for basic staples (grains, sugar and cooking oil) at discounted prices, with the aim of stabilizing food prices at tolerable levels, despite inflation, devaluation and other monetary shocks. Direct nutritional support, often administered in the context of the health care system, may be needed for young children and other especially vulnerable groups.

Third and final, as crises may cause an increase in the number of orphans, abandoned children, children subject to exploitative labor, child deviance and abuse (see Part IV), there is an urgent need to strengthen child protection and measures that support the integrity of the family, by reducing parental stress and family violence**.** In dealing with the macroeconomic crises, governments may be tempted to reduce budget allocations to child care and child-youth protection, which may be perceived as a less important. This position must be fought with energy as all the international studies (starting from the famous US study 'HeadStart Program' initiated in 1965) show the enormous benefits deriving from child care and early child stimulation in terms of school performance, socialization, future employment and lower social deviance.

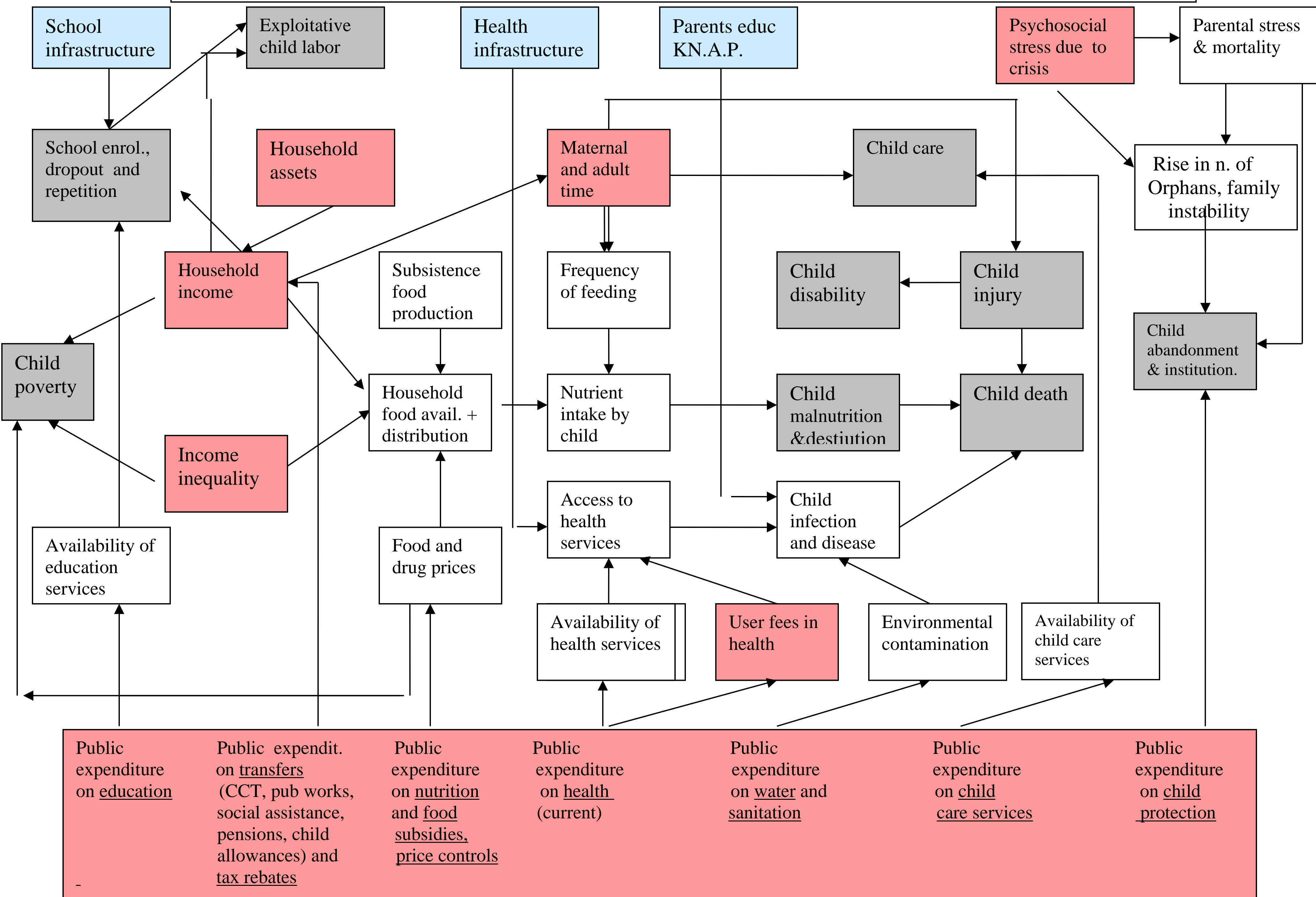


Figure 3, Relationship between the immediate determinants (in blue and red) and indicators of child wellbeing (in grey)
School infrastructure
Exploitative child labor
Health infrastructure
Parents educ KN.A.P.
Psychosocial stress due to crisis
Parental stress & mortality
School enrol., dropout and repetition
Household assets
Maternal and adult time
Child care
Rise in n. of Orphans, family instability
Household income
Subsistence food production
Frequency of feeding
Child disability
Child injury
Child abandonment & institution.
Child poverty
Household food avail. + distribution
Nutrient intake by child
Child malnutrition &destiution
Child death
Income inequality
Access to health services
Child infection and disease
Availability of education services
Food and drug prices
Availability of health services
User fees in health
Environmental contamination
Availability of child care services
Public expenditure on education
Public expendit. on transfers (CCT, pub works, social assistance, pensions, child allowances) and tax rebates
Public expenditure on nutrition and food subsidies, price controls
Public expenditure on health (current)
Public expenditure on water and sanitation
Public expenditure on child care services
Public expenditure on child protection

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