

## Financialization, Commodity Markets and Global Value Chains

Insights from a Literature Review and the Valueworks Project

Katja Hujo Luisa Lupo

Research Paper 2022-1

Valueworks: Effects of Financialization along the Copper Value Chain

May 2022



The United Nations Research Institute for Social Development (UNRISD) is an autonomous research institute within the UN system that undertakes multidisciplinary research and policy analysis on the social dimensions of contemporary development issues. Through our work we aim to ensure that social equity, inclusion and justice are central to development thinking, policy and practice.

UNRISD, Palais des Nations 1211 Geneva 10, Switzerland

Tel: +41 (0)22 9173060 info.unrisd@un.org www.unrisd.org

This United Nations Research Institute for Social Development (UNRISD) Research Paper is part of the project Valueworks: Effects of Financialization along the Copper Value Chain. The project was funded by the Swiss Network for International Studies (SNIS).



Copyright © UNRISD. Short extracts from this publication may be reproduced unaltered without authorization on condition that the source is indicated. For rights of reproduction or translation apply to UNRISD, which welcomes such applications.

The designations employed in UNRISD publications and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of UNRISD concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The responsibility for opinions expressed rests solely with the author(s), and publication does not constitute endorsement by UNRISD.

#### Contents

Introduction	1
Understanding financialization	2
Financialization and social development: Exploring impact pathways at the macro level	8
Exploring pathways to social impact at meso and micro levels: Financialization of global	
value chains and global production networks	.11
The case of the copper value chain in Zambia: Applying an integrated macro, meso and mic	cro
level perspective	.14
Conclusions	.20
References	.22
List of Figures	
Figure 1. Proportion of countries experiencing a banking crisis by year, 1800-2016	3
Figure 2. Total domestic private debt securities (amount outstanding) as a share of GDP by	r
region, 1996-2017	7
Figure 3: Evolution of copper price in USD/ton (5 PM close), 2012-2021	
List of Tables	
	F
Table 1. An overview of critical approaches to the study of financialization	
Table 7. Contribution of the extractive sector to the Yampian economy (701X-7019)	17

#### **Abstract**

This paper examines current debates on financialization—defined as the increasing role of finance, its institutions, actors and broader motives, in the operations of the global economy and its implications for global value chains and transnational commodity trade related to extractive industries. It is a contribution to Valueworks: Effects of Financialization along the Copper Value Chain, a project examining the transnational flow of copper and its impact on social development trajectories and local lifeworlds, connecting Zambia, Switzerland and China. The purpose of this paper is to reflect the multidisciplinary nature and diversity of this growing field of study, as well as to set out potential conceptual lenses to better understand financialization's social and economic development impacts at macro, meso and micro levels of analysis. In particular, it underscores the need to better understand the ways in which gains and losses along global commodity chains are distributed between different financial, market and non-market actors. It also highlights the need to account for the uneven ways in which price volatility, cost-cutting and value chain restructuring in pursuit of shareholder value affect household income, employment, well-being and social relations. Focusing on financialization in this way will not only bring to light issues that have been overlooked, providing a deeper understanding of the direct, indirect, and differentiated consequences of financialized commodity production and trade on local lifeworlds, but it will also inform policy directions that are compatible with the required transition toward more inclusive, stable and sustainable development models.

#### **Keywords**

Copper; financialization; gender; global value chains; Zambia

#### **Bios**

Katja Hujo is Senior Research Coordinator at the United Nations Research Institute for Social Development (UNRISD).

Luisa Lupo is a PhD candidate in International Relations/Political Science at the Graduate Institute of International and Development Studies, Geneva.

#### Introduction<sup>1</sup>

The present day is marked by multiple crises and mounting uncertainties. After several development decades which have led to considerable though uneven progress (Köhler 2015; UNDP 2019), current challenges are compounding, ranging from poverty and hunger, climate change, unsustainable growth patterns and economic crises, migration, flight and displacement; inequality, social exclusion, lack of decent work and social protection, health epidemics such as Covid-19; to political instability, insecurity and violent conflicts (UNRISD 2016). While the Agenda 2030 for Sustainable Development sets out to address the root causes of these problems and "transform our world" (UN 2015), it does not provide an analysis of the drivers of current crises, nor a clear roadmap of how countries can embark on more sustainable and inclusive development paths and rebuild better in response to the current Covid-19 pandemic.

Neoliberal globalization—a combination of accelerated economic integration propelled by trade and capital account liberalization, the Information and Communication Technology (ICT) revolution and market-oriented policies—has been identified as one key driver of economic and financial crises and growing inequalities within and between countries (UNCTAD 2020; Utting et al. 2012). This globalization model, imposed since the early 1980s, is closely associated with two phenomena: financialization and the rise of transnational production, investment and trade organized along global value chains (GVCs). Exploring the interlinkages between these two phenomena and their development implications for different actors across connected sites promises to bring important insights to current debates on how to transition towards more equitable, inclusive and sustainable economic systems.

Against this backdrop, the purpose of this paper is to provide an introduction into the conceptual debates around financialization, in particular with regard to trade of mineral products, and economic and social impacts of financialization at multiple levels. It aims to highlight the deep-seated power imbalances inherent in the global division of labour along value chains (Phillips 2017), as well as move beyond the nation state as the privileged category of analysis, toward a more integrated macro, meso and micro framework. In doing so, this paper provides an overview of the rich interdisciplinary literature that grapples with the increasing dominance of finance in our global economy, with implications that move from the higher macro levels down to local living conditions. As a revised background paper for the project *Valueworks: Effects of Financialization along the Copper Value Chain* (see Box 1), the paper combines analysis of theoretical and policy literatures with empirical insights from the project.

The authors are grateful for very useful comments from two external peer reviewers as well as from UNRISD colleagues and researchers of the Valueworks project. For further information on the project visit www.unrisd.org/valueworks.

#### Box 1. The Valueworks project

Valueworks examined social dynamics at the different nodes of a particular global value chain, following one single commodity, copper, from mining pits and the surrounding communities in Zambia, through towns and harbours on African transport corridors, through Swiss trading firms and banks, to the sites of industrial production and recycling in China. The project aimed to provide a better understanding of the creation and transformation of value in the transnational flow of copper and its impact on local lifeworlds. It examined financialization and its consequences for extractive industries in different sites and in structuring and transforming global commodity trade. It identified implications with regard to national and local policies along the value chain as well as arguments for better regulation and oversight of international trading systems (Kesselring et al. 2019).

The paper is structured as follows: in the next section, we introduce the background and relevance of financialization as well as definitions and the main theoretical standpoints, namely the regime of accumulation, critical social accountancy and financialization of everyday life approaches. Section 3 explores the ways in which financialization has affected social development outcomes with an emphasis on the macro level, from growing indebtedness, instability and crises, to the collateralization of social policy. Section 4 explores the linkages between financialization and commodity markets, highlighting the need for meso and micro analyses to understand the broad range of differentiated impacts it produces for different actors along global value chains and within global production networks, such as multinational buyers, local suppliers, communities, households and workers. The fifth section discusses some findings from the Zambian case study of the Valueworks project. In the concluding part we identify some areas for future research and formulate policy implications emerging from the literature review and project findings.

#### **Understanding financialization**

Financialization is most frequently defined in Epstein's words as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein 2005: 3). It is both a phenomenon and a process that dates back to the 19<sup>th</sup> century and earlier when it was analysed by prominent economists (for example Bagehot 1873; Marx 1894; Hilferding 1910; Keynes 1924), including to explain the stock market crash in 1929 and the subsequent Great Depression (Keynes 1936).

Financialization was subsequently reined in during the "30 glorious years of capitalism" in the post-war period from 1948 to 1977, when the Bretton Woods monetary and financial system of fixed exchange rates and financial regulation, combined with Keynesian policies of demand stimulation, led to steady economic growth and progressive extension of social rights in some

parts of the world (Bresser Pereira 2010), although to varying degrees and not without contradictions, especially in developing regions.<sup>2</sup>

The end of the Bretton Woods system in 1971 also marked the end of the Fordist model of industrialized capitalism and paved the way for a new period of neoliberal, finance-led capitalism, fueled by the development of digital ICT. This period was characterized by widespread liberalization and deregulation of financial markets and capital accounts to reduce government intervention that had limited domestic economic actors' access to foreign capital and regulated financial markets through ceilings on interest rates, reserve requirements, taxation of financial transactions and compulsory credit allocation, also referred to as "financial repression" (Shaw 1973; McKinnon 1973). This process of liberalization and deregulation was supposed to increase savings and investment and, according to monetarist and neoclassical economists, provide the foundations for economic growth (Galbis 1976). Liberalization under conditions of monetary and financial instability, however, triggered a sequence of global and regional financial crises from the late 1970s and early 1980s (Diaz-Alejandro 1985) through the mid and late 1990s, up until the global financial crisis of 2008 as illustrated in Figure 1 below.

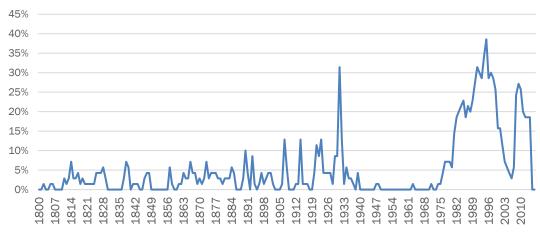


Figure 1. Proportion of countries experiencing a banking crisis by year, 1800-2016

Source: Harvard Business School (2018), based on data for a total of 70 countries (authors' elaboration)

In particular, the 2008 crisis and its deeper roots in the acceleration and deepening of financialization in the 1990s and 2000s (Utting et al. 2012) have exposed the weaknesses of the financialized world economy and the ways in which unregulated trade can amplify imbalances leading to crises in both commodity and financial markets (the crisis was also called the triple F crisis: finance, food and fuel). Despite calls from academics, civil society activists

This period has been described by Kari Polanyi Levitt in Canada as follows: "This model of 'embedded liberalism', which yielded three decades of high growth, was underpinned by an institutional framework which regulated and restricted both the power and the mobility of capital. Finance was subservient to production. Financial institutions channeled savings to investment and were strictly regulated. Central banks served as instruments of the government, with full employment as primary objective; price stability was secondary. Banks were not permitted to charge more than six percent interest on loans or to engage in mortgage or investment banking. There were exchange controls, and no private trading in foreign currencies. Social expenditures were financed by progressive income taxation. In Canada, the highest tax bracket was 80 percent; in the United States it was even higher at 94 percent" (2008: 8).

and other political actors for greater regulation and improved governance of the global financial architecture and for a new global development model (Bresser-Pereira 2010; Utting et al. 2012; Jolly et al. 2012; Ocampo 2014; UNCTAD 2015), progress has been insufficient so far and has further accelerated financialization, directed by the neoliberal political project.<sup>3</sup> At the same time, this has been accompanied by a significant increase in knowledge production on financialization (Mader et al. 2020).

Crucially, financialization cannot be solely captured by shifts in financial and monetary conditions. The increasing role of finance encompasses economic, social (including cultural) and political dimensions and affects livelihoods, as well as dynamics within and across countries. Reflecting the multidimensional nature of financialization, the literature has seen a proliferation of different definitions and methodologies investigating "how an increasingly autonomous realm of global finance has altered the underlying logics of the industrial economy and the inner workings of democratic society" (Van der Zwan 2014: 100). Because the concept conveys multiple meanings, it represents the ideal arena for interdisciplinary studies (Aalbers 2015). Positive and critical approaches, belonging to different strands in the social sciences, present multiple nuanced arguments and come to heterogeneous conclusions about its impacts and required policy responses.

While proponents of neoliberal economic approaches argue that financial sector development is a key driver of economic growth (Sahay et al. 2015; World Bank 1989, 2001), the term itself has largely been absent from this literature. In fact, authors using the term financialization tend to address the criticisms, rather than potential, of financial deepening, defined as the accumulation of financial assets at a faster pace than accumulation of nonfinancial wealth (Shaw 1973).

These contributions have been grouped aptly into three main approaches summarized in Table 1: regime of accumulation; critical social accountancy; and financialization of everyday life (Van der Zwan 2014). To a certain extent, these traditions also reflect three complementary approaches to understanding financialization, at macro, meso and micro levels respectively. In fact, in terms of the main unit of analysis, the first approach centers around the role of the state in financialization; the second on firms; while the third emphasizes changes for households and individuals.

\_

While neoliberalism is frequently associated with economic policy and free market ideology, it is aptly described as a political project, see for example Harvey (2005), Bourdieu (1998), Bresser-Pereira (2010).

Similar to the term neoliberalism; see for example Harvey (2005), and the reader compiled by Saad-Filho and Johnston (2005).

Table 1. An overview of critical approaches to the study of financialization

	Analytic focus	Disciplinary fields	Policy recommendations
Regime of accumulation	Patterns of accumulation through financial channels as opposed to trade and commodity production (Stockhammer 2012; Becker et al. 2010; Krippner 2005; Williams 2000); including with respect to the increasing role of finance in social policy and the welfare state (Fine 2012, Lavinas 2016, Hujo 2004)	Critical social sciences and heterodox economics	De-financialization/greater regulation of the financial system Reallocation of investments from financial to fixed assets Active labour-market policy Strengthening public service provision and social security
Critical social accountancy	Changes underway at the company level and the ways in which corporate management has shifted to prioritize shareholder interest (Jürgens et al. 2010; Milberg 2008; Lazonick and O'Sullivan 2000; Aglietta 2000; Williams 2000)	Critical social sciences and heterodox economics	Regulation of hedge funds' activities Reallocation of investments from financial to fixed assets
Everyday life	Ways in which financialization and financial judgment shape and are shaped by daily life (Langley 2008; Pellandini-Simányi et al. 2015; Van der Zwan 2014; Martin 2002; Dixon 2008) as well as social and cultural life (Chiapello 2015, Bourdieu 1998)	Anthropology, sociology and feminist political economy	Redress inequalities via understanding how the effects of finance play out for different social groups in different contexts Strengthening public service provision and social rights

Source: Authors

The regime of accumulation approach brings together a wide range of studies, some of which focus on the inherently economic dimension of financialization (Akyüz 2014) while others emphasize its distributional and socio-political implications (Stockhammer 2012; Zalewski and Whalen 2010; Palley 2007). Another important set of studies in this field examines the financialization of social policy and welfare states (Fine 2012; Lavinas 2016; Van der Zwan 2020), a process with profound implications for social development outcomes. While this is further elaborated in the next section on financialization at the macro level, it is important to stress here that recommended policy response stemming from this approach entail a fundamental shift away from palliative social policies, which function to remedy "market failures" while strengthening financialization (Lavinas 2016; UNRISD 2016). In contrast, the recommended policy response is to establish a comprehensive and universal social policy system (see Hujo 2004; UNRISD 2010; 2016) in tandem with economic policy that supports employment creation and wage increases.

Turning to critical social accountancy, studies have intervened in the debate on financialization by focusing on the existing tensions between shareholder and stakeholder interests and the prioritization of the former over the latter under contemporary capitalism. While this approach has been crucial in advancing policy solutions for greater financial market regulation, analyses have remained largely firm-centered and Eurocentric. Moving beyond this approach and thus supplementing some of its blind spots, studies concerned with the financialization of everyday life have examined how financialization and financial tropes imbue the ways in which people live and act, for example, turning citizens into investors (Van der Zwan 2014: 111). By focusing

on financial practices and their effects, this approach has emphasized the ways in which financial imaginaries transform or "colonize" valuation processes of social, cultural or environmental activities, which come to be increasingly seen "from the investors' viewpoint" (Chiapello 2015: 30). In line with the accumulation regime approach, some authors call for a spatially informed analysis of financialization to understand its uneven effects (Sokol 2017; French et al. 2011; Aalbers 2015), while others challenge the moral dichotomies of contemporary capitalism and financialization, such as the distinction between a real and speculative economy, in order to design a regulatory framework that limits the social damage caused by financial crises (Hertz and Leins 2012). Further, some question concepts in the realm of finance, such as "market efficiency", treating them as object of study rather than a matter of facts (Ortiz 2014; Bourdieu 1998). However, there is still a tendency in some of this literature to frame the everyday as a separate realm, upon which financialization exerts an influence, failing to account for the ways in which everyday practices are themselves constitutive of it.

Often referred to in relation to financialization and called into question by studies of the everyday is the Marxian distinction between real and fictitious capital (Lapavistas 2009; Bresser-Pereira 2010; Hermele 2013; Marx 1894). This distinction is premised on the notion that real capital represents a fundamental input for production, while fictitious capital contributes to the circulation of money without producing real value or fulfilling any productive purposes. As suggested by scholars of financialization of everyday life, however, this analytical separation is misleading as it neglects the ways in which finance has real effects. As a result, this distinction reproduces classical/neoclassical understandings of monetary and financial issues that view "money as a veil" without repercussions on the real economy, rather than as a crucial coordinating mechanism of the economy in its materiality (Riese 1996). As Hertz puts it, financial speculation engenders a mass escape from reality, although dematerialized financial instruments do gain material form in other parts of the economic fabric, it is the epistemological framework through which it is conceptualized "that makes it feel unreal" (2000: 49). Thus, there is a need to move beyond this dichotomy of real/fictitious capital and of everyday life as separate from 'higher' activities of finance in order to fully grasp financialization's material conditions and effects.<sup>6</sup>

In line with different conceptualizations of financialization, though prevalently within the economics discipline, scholars have developed heterogeneous **measures of financialization**, from the macro to the micro level. These can be grouped in three broad categories (Becker et al., 2010): (i) measures based on the distinction between financial and real capital, such as the ratio between firms' financial assets and total assets (which includes real assets); (ii) estimates that rely on aggregate data at the level of the economy, for example the proportion of private debt as a percentage of GDP or metrics that compare different sectors (Krippner 2011; Neely

\_

The assumption that money is neutral is the basis of the Quantitative Theory of Money (Irving Fisher, Milton Friedman). Neutral money assumes changes in the money supply affects only prices and not output and employment. This assumption has been refuted by Keynes and his followers.

Davies (2016) elaborates this critique further in relation to the growing attention to the everyday in international political economy literature more broadly drawing from post-colonial approaches.

2022); and (iii) measures that capture financialization at the micro-level, such as household debt or interest payments as a percentage of household income. An example of these measures is shown in Figure 2.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% East Asia & Pacific Europe & Central Asia Latin America & Caribbean Middle East & North Africa -North America South Asia Sub-Saharan Africa

Figure 2. Total domestic private debt securities (amount outstanding) as a share of GDP by region, 1996-2017

Source: World Bank 2021a (authors' elaboration)

While household indebtedness appears to be rising in East Asia and the Pacific, Europe and Central Asia, and North America (after a sharp drop since the global financial crisis), it stands at relatively lower levels in other regions such as sub-Saharan Africa. This should not blind us to the impacts of financialization on household and communities in these regions, which, indeed, are increasingly integrated in circuits of financialized commodity trade. This latter is often measured in terms of commodity prices, for example, in terms of price volatility, comovements between selected commodity returns and the world equity index, and correlations between prices of different commodities (ECB 2011). Yet, metrics that relate financialized commodity trade to household outcomes are largely absent from the literature, particularly for the sites where these commodities are produced. This contributes to limited understandings of financialized commodity trade, concealing problems therein.

To sum up, financialization can be understood as the growing and dominant role of finance in development processes and in the global economy at large and can be analysed from diverse perspectives. The term is mainly used by critical scholarship to highlight the risks and costs associated with financial deregulation and financial deepening, as well as the imposition of a financial logic in spheres where other values should be prioritized (for example in culture, social policy or the natural environment), seeking ways to rein in financial power and ensure

accumulation processes that are more inclusive, stable and sustainable. In order to clearly distinguish financialization from other phenomena such as marketization or privatization, Mader et al. (2020) recommend making definitions or conceptualizations limiting (what it is and what it is not), mechanism-oriented (cause-effect) and contextualized (in which context is it valid). With respect to its measures, there is a tendency to reproduce the dichotomy of real/fictitious capital that dominates neoclassical approaches, neglecting, as argued earlier, the ways in which real and financial sectors are mutually interdependent. Further, there is a paucity of data with respect to measures of financialization at the micro level, particularly in developing regions. This poses significant challenges in understanding uneven and differentiated impacts of financialization across regions and for different social groups.

## Financialization and social development: Exploring impact pathways at the macro level

The previous section has identified some of the most important definitions, approaches and measures to understanding financialization and mentioned some key recommendations from representative proponents of the main analytical frameworks; the accumulation regime, the social accountancy literature and the financialization of everyday life scholarship. This discussion is continued in this section, with more specific reference to social development challenges faced by mineral-producing and resource-rich developing countries at the macro level.

In contrast to the theoretical predictions of orthodox economic theory, financialization has been associated with growing indebtedness of countries and households, instability and crises, as well as growing inequalities and an individualization of risks. At the level of the macroeconomy, these have unfolded through heightened international imbalances, the accumulation of external debt, the collateralization of social policy, as well as a so-called reprimarization of the economy (structural change where the primary sector regains importance in response to rising world market prices of commodities) and rising inflation. While greater interconnectedness among countries, fostered by the development of new financial instruments, has provided access to new financing opportunities (Jobst 2008; Bernard et al. 2012), it has also exposed developing countries to additional sources of uncertainty and **instability**, such as the boom-and-bust cycles experienced by many oil and mineral exporting countries in the 1990s and 2000s (UNCTAD 2015; Hujo 2003; UNRISD 2016). These reveal the inadequacy of financialization as an external financing strategy (Garcia-Arias 2015), particularly if capital inflows are not funding productive investments or social infrastructure, but merely take advantage of interest rate spreads and (artificially) high returns on capital markets.

Another important effect of financialization is the accumulation of **external debt** by developing countries. Minsky's theory of firms' financial cycle (1986) was pioneering in providing an understanding of the inner workings of the financial system, suggesting the

existence of an inherent tendency towards crises. Kregel (2004) argues that developing countries that rely on capital inflows from international financial markets, as Minsky's business firms do within the domestic economy, are subject to a deteriorating financing dynamic that leads the way to speculative financing, and eventually to à la Ponzi financing. In doing so, the typically short-term and speculative nature of capital inflows that financialization entails generates sizeable external debt burdens, and results in inflationary pressures and exchange rate overvaluation (the so-called Dutch disease phenomenon), as well as austerity measures with harmful consequences for living conditions (Perrons 2021). Thus, external speculative financing does not guarantee a reliable source for financing long-term development strategies (UNRISD 2016) and, when it attracts speculative capital flows, it does so at the expense of increased commodity prices, oftentimes heightening distributional inequalities.

Further, as argued in the previous section, financialization over the past decades has increasingly been taken up by the welfare state, with social protection regimes increasingly relying on the financial market and financial instruments promoted for the provision of social protection and social services. The **financialization of the welfare state** or the collateralization of social policy (Lavinas 2016) through market-based reforms, such as privatization of pensions and health insurance and commercialization of housing, health and education, has increased household debt, leading to an individualization of risk and greater exposure of individuals and households to market volatility. Some authors refer to a process of "democratization of finance" defined as "the broadening and deepening of access to the capital market for ordinary, moderate-income individuals and households" (Erturk et al. 2007: 554). Proponents of this view highlight that financialization has reduced states' and employers' responsibility for the provision of services to protect citizens and employees against the uncertainties of life. However, the seemingly generous provision of access to credit to previously excluded groups went hand in hand with stagnating or falling real wages and increasingly precarious employment conditions (Fukuda-Parr et al. 2013). As a result, individuals and households have become increasingly responsible for investments in safety nets, education, training and more broadly managing risk throughout their life cycle, often in a context of asymmetric information and inadequate financial literacy, as well as insufficient and unstable household income to shoulder commercial debt burdens, a constellation that was at the heart of the US sub-prime crisis in 2007-8.

The reasons underlying the financialization of the welfare state and the recommodification of social reproduction are manifold and its drivers are closely related to expanding profit opportunities and market shares for financial market actors (in particular commercial banks, see Bresser Pereira 2010, as well as pension funds, see Hujo 2004). These have boosted a mass-consumption society in times where stable employment opportunities, decent wages and social benefits were undermined by economic crises and austerity policies (for the case of Brazil, see Lavinas 2016). Consequently, instead of benefiting from decent work and solidarity-financed

<sup>-</sup>

A Ponzi scheme is a fraudulent investing scam which generates returns for earlier investors with money taken from later investors.

public social security, households have been referred to financial instruments to top-up their precarious incomes and protect against life-cycle contingencies, an unsustainable strategy increasing household precarity and vulnerability.<sup>8</sup>

Turning to the **financialization of commodity exports**, it is important to note that primary production (production related to agricultural or mineral resources) continues to play a crucial role in many developing countries, in contrast with mainstream development theory, which predicted a linear and gradual transition away from primary products towards more diversified and higher value-added activities such as manufacturing or services. While the experience of some countries, particularly in East Asia, partly reflects this trajectory, in the majority of cases, integration in the global markets has led to a further deepening of primarization and reprimarization of domestic economies. While liberalization policies promoted during the Washington Consensus period have contributed to this development, financialization has also played an important role: it has increased commodity prices as a result of hedging and speculative investments in commodity markets, leading to further price increases and volatility, worsening Dutch disease effects and crowding out other investment opportunities. <sup>10</sup> Thus, financialized commodity markets can generate an additional conduit for external shocks, and effects may be more extreme for countries with a relatively large share of commodities in their trade account, such as resource-rich countries (Mayer 2012). This phenomenon was particularly evident during the 2007-8 financial crisis, which shed further light on the negative spillovers effects of deregulated (financial) market-led growth for countries at the periphery of the global financial system.

To conclude, financialization of commodity trade and uneven integration in global financial markets has affected the development opportunities of developing countries that depend on primary exports in significant ways, exposing them to the vagaries of the market, with some unable to protect effectively against risk and to reap profit opportunities. The ways in which this affects social development, local lifeworlds and social relations within global production arrangements needs to be investigated through case studies, of which the Valueworks project is one example. At the macro or country level, research needs to explain how financialization contributes to macroeconomic instability, increasing public debt, heightened inequalities and imbalances, and a specific approach to social policy which undermines risk pooling and redistribution. To explore the differentiated impacts and opportunities for actors within a

\_

The resulting growing role of institutional investors such as pension funds shapes in turn financialized commodity markets: their search for new and safe investment opportunities and the creation of new instruments such as commodity index funds in the 2000s (and changes in regulation that allowed funds to invest in them) is said to have fueled food and other commodity prices, contributing to the triple crisis that unfolded in 2007 (Christian Aid 2011).

Structuralist development economists and scholars, and more recently the proponents of the resource curse approach, have been sceptical regarding development driven by the primary sector (Davis and Tilton 2005; Rosser 2006; Frankel 2010). For a critical engagement with the resource curse narrative, see for example Hujo 2012; UNRISD 2012; Schubert et al. 2018.

The most recent commodity boom has also increased fiscal space in many resource-rich developing countries, which has allowed progressive governments in Argentina, Bolivia, Brazil and Ecuador – to name a few – to expand social protection and social services, with positive outcomes for poverty reduction and equality, see UNRISD (2016) and Hujo (2012). However, in a context of growing concerns about the global climate crisis and local environmental destruction, neo-extractivism or resource nationalism is increasingly criticized (Koch and Perreault 2019; Svampa 2019).

particular production network, for example copper, as well as the concrete impacts of financialized commodity trade for workers, households and communities along the copper value chain, however, a meso and micro perspective must be incorporated, as detailed in the next section.

# Exploring pathways to social impact at meso and micro levels: Financialization of global value chains and global production networks

In order to understand the causes and effects of financialized commodity trade, a brief introduction into the more technical aspects of commodity trading is warranted. Commodities can be traded either on commodity spot markets or derivatives markets. While commodity spot markets imply the actual delivery of physical commodities, derivatives markets enable the exchange of obligations or options for the delivery of a specific commodity in the future. More specifically, commodities on derivatives markets can be sold over the counter (OTC), bilaterally between buyer and seller, or through a clearing house (for example on centralized futures markets). OTC trading activities pose distinct challenges related to monitoring, since contracts are off-exchange and therefore unsupervised. Exchanges through a clearing house, by contrast, enable trade in standardized entities, as quantity, maturity date and location of the underlying commodity are established in the contract. Returns for investors are determined by the difference between the price of the commodity when the contract is made and the expected price on its due date. In theory, financial investors in the futures market differ from other economic agents, such as commercial traders, producers and consumers, because they do not trade on the basis of fundamental supply and demand relationships. Nevertheless, as they hold large positions in commodity markets, they exert a significant influence on prices, which, as a consequence, increasingly follow the logic and trends of financial markets (UNCTAD 2011). In particular, investing in commodities such as copper and crude oil has become an "investment style" for stock investors (Adams and Glück 2014), illustrating the extent to which trade in financial markets can affect the markets of physical commodities.

An important distinction often made in the literature on financialization of commodity markets is that between **speculation** and **hedging**. The former is generally defined as a financial technique that aims to generate profits through increased exposure to risk (engaging with risk). The latter, by contrast, consists of investing in two financial products—commonly a stock and a derivative based on the same underlying asset—with the purpose of protecting against price fluctuations (transferring risk). While this distinction is generally based on the types of actors involved and their motives, it has become increasingly blurred in practice. In fact, financial deepening has led to a greater involvement of financial investors in trading physical commodities, while large commercial traders often engage in speculative trading, raising questions related to conflicts of interest and manipulations (Heumesser and Staritz 2013: 42). In the case of chocolate distribution and trading, for example, there is evidence that large trading companies in the physical market and hedge funds use arbitrage strategies to profit in

the financial market by changing their buying behaviour within local commodity markets (Purcell 2018). Thus, separating actors in the real economy who contribute to financialization for risk management purposes and are motivated by the delivery of physical commodities, from speculators who are gambling for profit, may be too simplistic. However, not being able to separate the two poses significant challenges to the regulation of the trading system itself, an argument which is supported by evidence from the Chinese case in the Valueworks project (Kesselring et al. 2019).

There has been extensive focus on the effects of financialization on commodity markets from an economistic perspective. Based on the distinction between speculative and commercial traders discussed above, for example, some authors sought to measure the effects of financialization, specifically of "noise traders" (those who seek to anticipate price movements in order to extract profits), on commodity spot prices (Basak and Pavlova 2014; Kaufmann 2011), as well as the co-movement between prices of different commodities that are apparently not related to each other but are bundled together in specific financial instruments (Garrett and Taylor 2001). Results are consistent in supporting the argument that financial markets serve as a conduit for outside shocks, increasing volatility in commodity prices, within and across different commodity markets (Ing-Haw and Xiong 2014; Tang and Xiong 2010: 72). 11

Though increasing prices in markets for minerals such as copper may not have the same negative impact on people's lives as in the case of food markets, scale, price volatility and company practices in pursuit of shareholder value, such as cost-cutting and restructuring, do have significant impacts on social development outcomes. These can be classified into direct impacts on mining communities, such as reduced incomes and fewer employment opportunities, or dismantling entire mine projects, and indirect effects stemming from macroeconomic instability and reductions in fiscal revenues. For a deeper understanding of how financialization of commodity trade affects the lives of communities and individuals in places where financialized commodities, such as copper, are actually produced, it is useful to look into the social accountancy and global chain literature, 12 which moves the analytical perspective from the macro economy to the meso and micro levels. How does financialization affect the ways in which global industries are organized and governed? What are the strategies of multinational corporations to reap the benefits of globalized and financialized production and trading, and what consequences do these strategies entail for local communities? Whereas the macro perspective outlined in the previous section is useful to understand the broader global context in which copper extraction and trading takes place, the meso and micro frameworks

\_

Price volatility itself generates both gains and losses along the value chain of a given commodity. While it can translate into unstable incomes, it also offers opportunities for the extraction of financial rents for certain actors: "There is thus a tradeoff between reduction in a chain actor's exposure to price movements and their ability to extract rents" (Newman 2009: 550). Whether or not physical traders engage in speculation depends on the availability of resources to protect against eventual losses. Moreover, even if local market actors are provided with instruments to protect from downswings in prices, this does not necessarily guarantee that they will be able to earn income from potentially profitable upswings (Newman 2009: 550). In fact, this will depend on firm size, access to finance and to information, as well as brokerage services, which often only offer protection against downswings to smaller local market actors. Bowman (2018) points to the important fact that the commodities super-cycle provided a rational for increased risk taking, leading to balance sheet fragility and excess capacity, exacerbating the adverse impacts during down-turns.

This literature is related to the linkage approach developed by Hirschman (1981).

help to analyse the specific position and strategies of different actors involved in copper production and trading, the power asymmetries among them, as well as concrete regional and local development implications.

The literature on commodity chains, value chains, and production networks can help further advance meso and micro understandings of financialization, moving beyond a focus on the nation state that characterizes most macro approaches. The concept of global commodity chains (GCC), which has evolved into that of global value chains (GVC), originated from world-system theory and is traditionally concerned with the "network of labor and production processes whose end result is a finished commodity" (Hopkins and Wallerstein 1986: 159). Gereffi and colleagues have theorized this concept extensively over the past decades (Gereffi 1994; 1999; Dicken 2007; Bair 2009). In relation to social development, also named 'social upgrading' within this literature, the commodity/value chain framework is used as a diagnostic tool to uncover the terms of engagement of different actors and identify ways to improve their participation (Bair and Gereffi 2003; Gereffi and Fernandez-Stark 2016). According to this view, interventions should address how to make value chains equitable for every participant by improving their terms of participation, while at the same time minimizing the negative consequences for those who are excluded from these processes, especially local communities (Riisgaard et al. 2010). By integrating a gender lens, others seek to understand how upgrading along the nodal points of the chain affect gender relations and gender segmentation (Coles and Mitchell 2011). Proponents of a gender-aware value chain development approach stress the necessity for addressing gender-based disparities at different levels (Farnworth 2011), as well as intersecting power asymmetries, calling for greater attention to household and community outcomes (Coles and Mitchell 2011; Kaplinsky and Morris 2000; Haile 2020). While valuable, this approach, however, has adopted an economistic conceptualization of core-periphery activities "from how commodity chains structure global inequality at a systemic level to how they facilitate development at a unit level" (Bair 2014: 2). This elaboration marks a fundamental shift away from world system's attention to systemic inequalities, towards a narrower and more technocratic conceptualization of the production process.

Global production networks (GPN), by contrast, are concerned with the broader set of actors and geographical locations that are bound together in the production process and beyond (Coe and Yeung 2015). This approach seeks to provide evidence of scalar relations of power, incorporating the role of the state and non-firm actors (Hess and Yeung 2006). Coe and Yeung define global production networks as an "organizational arrangement comprising interconnected economic and noneconomic actors coordinated by a global lead firm" that is causally linked to uneven configurations of territorial development (2015: 32). Emerged in relation to GCC/GVC theories as a response to some of their limitations, the GPN framework moves away from the economistic focus on inter-firm dyadic relations of GVC analysis,

Another distinction between GVC and GPN is to define chains as the vertical sequence of events from delivery, consumption and maintenance of a good or service, versus a network that maps vertical and horizontal linkages between economic actors. See Sturgeon (2000: 6).

towards a relational perspective that integrates insights from economic sociology and geography. In this respect, the GPN framework lends itself particularly well to studying the broader range of actors involved in financialized commodity trade, as well as their social impacts at the local level, including from a gender perspective. Because women face several barriers in terms of access to capital and financial power (Kaplinsky and Morris 2000) and are most likely to bear the negative consequences of financial downturns, for example in terms of heightened responsibility for care work and non-market production (Elson 2002; Pollard 2012; Young 2018), it is vital to address the gendered implications of financialization of commodity markets and its role as a potential driver of social exclusion (Haile 2020).

The phenomenon of financialization and the rise of global production networks are intertwined with and facilitated by neoliberal reform (Morgan 2014). Not only did financial deepening increase the number of actors involved in the supply chain, but it also influenced the way these networks themselves are constructed. Financialization of commodity markets entails a greater presence of financial intermediaries that provide services to firms along the value chain (Coe and Yeung 2015), as well as "financial investors, who treat commodities as an asset class" (UNCTAD 2011: 1). How their growing presence reinforces or transforms relations of power along value chains and networks, however, warrants further investigation.

The application of the GPN approach to the mining industry underscores the role of the state in regulating the sector, as well as the importance of materiality and territoriality (Bridge 2008). In fact, extractive industries are arguably more reliant on territories and natural resources than other industries, such as in the manufacturing and service sectors, a feature that contributes to limiting the spatial configuration of the network itself. In the case of oil, and likely other commodities in the extractive industries, quality and ease of extraction (materiality) and specific relations between national, public resource owners and international companies for the allocation of licensing rights and taxation (territoriality) are key factors shaping the geography and governance of the GPN. In Bridge's words: "The extractive sector clearly illustrates how value can be created by enclosure and exclusion (via the extension of property rights)" (2008: 415). Thus, understanding the development implications of the extractive sector cannot transcend from a deeper analysis of state-firm and inter-firm power relations, and the social and institutional structures in which these are territorially embedded.

### The case of the copper value chain in Zambia: Applying an integrated macro, meso and micro level perspective

The case of copper production in Zambia and the learnings from the *Valueworks* project, as well as the broader literature presented in this paper, are illustrative of the extent to which commodity trade, particularly imbalances in demand and supply of the commodity itself, are likely to have significant economic and social impacts on local lifeworlds. The evidence discussed so far suggests that local communities at the point of production are likely to bear larger and more sudden adjustment costs due to financialization, but the question of whether

and to what extent such impacts are amplified, muted or transformed by this phenomenon warrants further investigation. A key challenge, however, is to precisely disentangle impacts stemming from simultaneous processes such as privatization or marketization (Haile 2020, Mader et al. 2020), as well as from the trade of the physical commodity vis-à-vis trade in its financial and more speculative form. While this is important for a more rigorous understanding of financialization and required policy responses, we argue that attempts to do so should be cognizant of the increasingly blurred boundary between financial and physical market actors, as well as the epistemological limitations of foundational dichotomies that separate real from fictitious capital, and daily life from 'higher-level' activities.

At the **macro level**, increasing financialization of copper trade appears to have mixed effects on social development in Zambia. The country is the seventh largest copper producing nation in the world (World Bank 2021c), mining accounts directly for 10 percent, indirectly for up to 50 percent of its GDP, while the share of copper trade in its total exports reached 77 percent in 2019, making it the country most dependent on copper exports in the world (EITI 2017, 2020; UNCTAD 2017). Fiscal revenues from mining have increased from very low levels after privatization of the mining sector in 1997, <sup>14</sup> contributing around 28 percent of government revenue in 2019 (EITI 2020). The contribution to employment, however, remains low, equal to 2.4 percent of total employment in 2019, as shown in Table 2, down from 15 percent in 1990 when the mining sector was still owned by the government (UNCTAD 2017).

Table 2: Contribution of the extractive sector to the Zambian economy (2018-2019)

	2019	2018	Var (%)
GDP	9.90%	10.70%	(7.48%)
Exports	77.00%	78.40%	(1.79%)
Revenues	27.77%	31.40%	(11.57%)
Employment	2.40%	2.90%	(17.24%)

Source: EITI 2020.

Although Zambia was designated a middle-income country in 2011 after years of commodity-driven income growth, it simultaneously experienced worsening social outcomes, from poverty to rising inequalities. In particular, undernourishment reached 50 percent of the population in 2011, the Gini coefficient increased from 0.42 2002 to 0.56 2010, the consumption share of the poorest 10 percent fell from 6.1 percent in 2002 to 3.8 percent in 2010, while the share of the richest decile increased from 33.7 percent to 45.2 percent (UNCTAD 2017). These tendencies have not changed greatly over the past decade, with poverty rates remaining at a high level of 60.1 percent of the population in 2020 (USD 1.9 in 2011 PPP, World Bank 2021b). Thus, economic growth driven by increases in copper prices did not translate into improved conditions for the majority of the population, instead it intensified the erosion of standards of living and safety nets (Cheelo et al. 2022).

For an instructive analysis on the political economy of resource extraction in Zambia from a historical perspective see Hinfelaar and Achberger (2017).

In order to establish a causal link between financialization and development outcomes, one of the most important impact channels of financialized copper mining on social development are commodity prices (see Figure 3). These are largely determined on international exchange markets such as the London Metal Exchange (LME) or the Shanghai Futures Exchange (SHFE), where speculative and hedging activities outpace physical trading (less than 5 percent of all futures contracts lead to a physical delivery, Berne Declaration 2011; Hecht 2016; UNCTAD 2012). While increases in copper prices may fuel an intensification of mining activities and over-exploitation of natural resources, with negative consequences for environments and communities, downswings in prices are likely to depress wages and employment in the medium-term, with ripple negative effects on investment, access to education, health care, housing, and nutrition in areas that are heavily dependent on mining, and in the entire country due to downward pressures on state revenues. Mineral dependence is clearly reflected in Zambian growth cycles: between 2000 and 2014, when international commodity prices were high, the annual GDP growth rate averaged 6.8 percent, slowing to 3.1 percent per year between 2015 and 2019, mainly attributed to falling copper prices and droughts (World Bank 2021b), a situation that has once more changed given steady price increases for key metals since 2020 as demonstrated by the upward pattern shown in Figure 3. It is yet to be seen, however, what these increases in copper price will mean for workers and communities in and around sites of extraction.

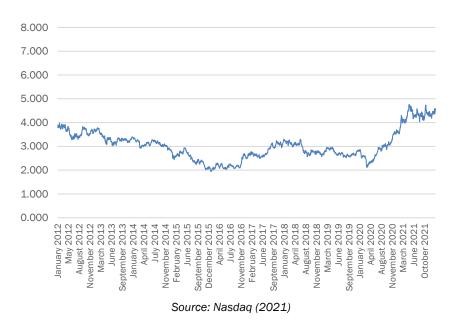


Figure 3: Evolution of copper price in USD/ton (5 PM close), 2012-2021

A meso level approach to financialization, by contrast, brings to light the differing positions and strategies of the full range of actors involved in copper trade and how these affect firms' incorporation within the production network. The question here is how financialization shapes power relations in the specific GPN under study both vertically, along the different steps of the production process, from extraction, to storing, trading and recycling of copper, and horizontally, in the broader context of national or regional economies, including in relation to

hedge funds, banks, governments, contractors, trade unions and civil society. Once more, further research is necessary to examine the behaviour of different financial, market and non-market actors in light of uneven access to information, financial brokerage services and how this translates into gains and losses along the chain, within the broader network and over time, potentially exacerbating inequalities between international and local actors and producers.

Findings from the *Valueworks* project are a first step in this direction and largely support the hypothesis that financialization deepens existing power asymmetries and value transfers between different actors and locations: higher-skilled, higher value-added services which guarantee more stable and higher profit margins within the GPN are increasingly delivered by international companies such as Swiss firms (for example Glencore and Trafigura), active in copper transport, certification, insurance, financial services and trade, activities that tend to be associated with lower risks and lower social and environmental costs than physical copper extraction in Zambia (Kesselring et al. 2019; Dobler and Kesselring 2019). The implications of these shifts at the local level are varied and intertwine with existing ownership structures, including of communal land, which is increasingly being privatized to meet the demand of mining companies, and of the mining companies themselves, as well as the infrastructures that these companies build in and around sites of extraction. In what follows, we briefly illustrate these shifts, before turning to the impacts of financialized copper trade at the micro level.

In relation to land, a key line of conflict has emerged in Zambia between small-holder agriculture and users of communal land and pressures to privatize landownership in response to demands from the mining industry, a pattern that reflects wider features of financialization, particularly that of value creation through the enclosure of formally common property, as argued by Bridge (2008). According to scholars in the *Valueworks* project, this conflict is best understood in light of the distinctive role of the state in regulating mineral extraction and protecting the commons in national territories and the proliferation of civil society organizations (CSOs) addressing economic, social and environmental dimensions of mining activities (Kesselring et al. 2019). CSOs can shape GNPs by increasing reputational and regulatory risks, influencing corporate strategies and value capture (Yeung and Coe 2015; Wright 2016 cited in Dobler and Kesselring 2019). While these organizations proliferated, increasing monitoring of negative environmental impacts and lobbying for greater respect of the rights of local communities, the responses to these claims have largely taken place through voluntary corporate social responsibility (CSR) programmes of mining companies, crowding out other forms of binding regulation. As a consequence, improvements remained limited at best, with little coordination and planning, or CSR programmes were in direct interference of governmental responsibilities (Hobi 2019; Kesselring 2018). Further, there is evidence demonstrating that these organizations have faced increasing pressure due to political repression under the Patriotic Front government, leading to a further watering down of the initiatives (Dobler and Kesselring 2019).

Moreover, as previous research demonstrates, ownership structures of mining firms matter for local suppliers and fundamentally shapes inter- and intra-network relations, including foreign cooperation through foreign direct investment (FDI) (Fessehaie and Morris 2013). Chinese-owned companies are more likely to prioritize short lead times and low prices over technical cooperation with their suppliers compared to traditional Western companies. These dynamics in Zambia are not divorced from China's dominant role in the global copper market as a key consumer, producer and trading hub of copper, but should rather be understood as a function of this role. Indeed, China's position in driving financialization and the hybrid structure of its economy—which further complicates dichotomies such as state and market, and real and financial economy—does not only add to the complexity of the copper GVC, but it also reinforces existing inequalities in the GPN and the subaltern position of producing countries such as Zambia (Kesselring et al. 2019).

Regarding ownership structures, it is also interesting to look at the recent re-nationalization of the Mopani copper and cobalt mines previously owned by Glencore. After Glencore stopped production in the context of Covid-19 supply-chain problems, it eventually sold the mines to the Zambian state-owned company Zambia Consolidated Copper Mines Investment Holdings (ZCCM-IH) for one US dollar and under the condition that the government of Zambia would take over accumulated debt of 1,5 billion USD, turning Glencore into a net creditor to ZCCM-IH. The latter must now guarantee to sell extracted minerals from the two mines to Glencore until the debt is paid back: ZCCM-IH will repay the loan by giving Glencore creditors 3 percent of Mopani's revenue until 2023, which will then rise to between 10 percent and 17.5 percent. Glencore, by contrast, argued that by selling its share the company would concentrate on its key business: commodity trading (Kesselring 2021; DW 2021). In terms of implications of these latest reforms, a greater stake of the Zambian state in the mining sector could lead to increases in fiscal revenues, stronger regulation and potentially higher profit shares retained in the country if accompanied by redistributive and corrective measures. For the time being, however, foreign mining companies turned creditors continue to exercise influence while the Zambian state is left with their harmful environmental and social legacies (Kesselring 2021).

Finally, another way in which copper producing and trading companies shape the lives of families and communities is through investment in infrastructure development projects. Indeed, as demonstrated by Kesselring (2018), companies engaging in copper extraction invest in large-scale infrastructure such as roads, housing for highly paid company employees and electricity to facilitate the extraction and transportation of this commodity. While these projects may increase service provision, this is often short-lived and does so in a deeply unequal way, leading to a spatial reordering of mining towns and to an uneven distribution of electrical power and resources, in many instances producing heightened inequalities and conflict.

These findings from Zambia resonate with evidence from manufacturing and industrial agriculture sectors in different contexts, where uncertainty of investments and value chain restructuring, intensified as a result of financialization, produced significant asymmetries in

network relations and in the extraction of rents (Purcell 2018; Newman 2009; Milberg 2008). In the case of platinum mining in South Africa, for instance, Bowman (2018) finds that financialization has exacerbated distributional tensions in the sector, as management has sought to restore internationally competitive rates of capital returns through layoffs, mine closures and asset sales, contributing to intense labour conflicts deemed among the most severe social conflicts in the post-Apartheid era.

At the **micro level**, it is important to examine how firms, especially local producers, communities and households are affected by changes occurring in copper extraction and trading and of how these are mediated by national and international policies regulating the sector. This entails understanding how price volatility, imbalances in copper trading and sourcing practices affect household income, employment opportunities and well-being, as well as gendered household relations and survival strategies.

Casualization of labour and heightened job insecurity driven by the restructuring of mining operations in response to the demands of financial capital caused contrasting effects for workers and their families along the Zambian Copperbelt. On the one hand, restructuring led to job losses and cuts to social protection, leaving workers with little or no alternative means to secure an income. In Solwezi, for instance, Nchito (2018) argues that financialized mining activities have led to decreasing employment opportunities as a result of retrenchments and technological innovation, while at the same time continuing to expose its inhabitants to negative environmental impacts. <sup>15</sup> Along these lines, Haile (2020) demonstrates that privatization of mining companies and increased financialization deeply shape these companies' operations, including by fostering a greater prioritization of profit over the welfare of workers, mostly as a result of copper price volatility, but also through concentration of private companies on their core business (that is trading), whereas the state-owned ZCCM offered a range of social services and infrastructure to mine workers. <sup>16</sup>

Not only does financialization indirectly affect the lifeworlds of workers and their families via negative employment impacts, it also directly shapes the way they navigate precarious working and living conditions. The financialization of everyday life of mine workers is clearly shown by Musonda's field study (2021) at the Kopala Mine: the share of mine workers taking bank loans increased from zero in 2000 to about 80 percent of general payroll staff by 2017. As workers' households rely increasingly on debt to meet expenses as well as investments in education, housing or businesses, debts often exceed their repayment ability, in particular during retrenchments (Musonda 2021; Haile 2020). In this case, outstanding loans tend to be guaranteed by severance payments, with the result of undermining their social protection function.

For an enlightening history of the environmental impact of the mining industry in the Copperbelt, see Peša (2020a, b).

One could argue that the combination of privatization and financialization imposed a (arguably not full) move towards a hard budget constraint on the sector in contrast to the soft budget constraint prevailing under ZCCM ownership, implying a new set of rules for the behaviour of firms in terms of their survival as well as new relationships with the state, see Kornai (1980).

On the other hand, and more positively, economic restructuring of mining operations engendered, in some instances, gradual changes in gender stereotypes and the household division of labour, allowing women to enter a variety of jobs (Evans 2014). As observed by Haile (2020: 17): "economic insecurities have also contributed to changing gender roles and gender relations for the better in some cases. For instance, when the traditional breadwinner in the family has been retrenched and can no longer earn an income, the woman whose work was mostly confined to the home may venture outside the home in search of an income." This evidence suggests that gendered impacts are not clear-cut, nor necessarily positive or negative, but rather complex and multifaceted.

While the literature in the global value chain and network traditions has seldom been applied to the case of extractive industries, as some authors argue (Bowman 2018), financialization is virtually absent from these studies altogether. The *Valueworks* project brings attention to this empirical blind spot and considerably advances our understanding of such phenomena and processes in a way that is sensitive to both specificity and scale of financialized commodity trade. It also demonstrates that an integrated macro, meso, and micro perspective is crucial to overcome these blind spots, highlighting not only the ways in which finance impacts local lifeworlds in Zambia, but also how these changes reverberate back to and are constitutive of the broader network of supply chain actors in Switzerland and China.

#### **Conclusions**

The purpose of this paper has been to introduce the concept of financialization and its links with social development and explore pathways to economic and social impact at macro, meso and micro levels. Following an overview of the different theoretical approaches to analyse financialization, which can be understood as the growing and increasingly dominant role of finance in processes of capital accumulation, corporate management, and everyday life, the analysis has focused on the financialization of commodity markets and global (mining) value chains and networks, as well as some of the challenges that are associated with unpacking and measuring this phenomenon.

At the macro level, the paper has delved into the negative development impacts of financialization regarding macroeconomic instability and global imbalances, the accumulation of debt, and the commercialization of social policy. While financialization of commodity trade has affected the development opportunities of developing countries in substantial ways, in some cases providing new financing opportunities, it has more often been a conduit for additional instability and crises. As highlighted by the *Valueworks* project, the position, sourcing and corporate strategies of different, geographically dispersed financial, market and non-market actors have important implications for employment, incomes and well-being of workers, families and communities, as well as social relations, including from a gender perspective. Thus, future research should continue to examine the socio-material consequences

of mineral value chains and commodity trading, challenging its status of location-independent activity, as well as the existing opportunities to improve regulation, accountability and transparency in the different locations where financialized trade and production take place.

With respect to policy responses, *Valueworks* and the initial evidence discussed in this paper indicates that a range of social protection, investment and redistribution policies tailored to each specific context will be necessary to offset the negative consequences of financialization on local market actors, households and communities. These interventions will need to take into consideration imbalances and trade-offs inherent in globalized production processes, and the ways in which these may be amplified or muted by financialization.

Some policy implications emerging from this research project are the following:

- Regulation and accountability of the commodity trading sector globally should be increased, by moving away from voluntary to legally binding and enforceable standards and establishing intra- and inter-state structures to monitor multinational companies' trading activities;
- Participation of producing countries in transnational supervision of financialized commodity trade and production should be promoted;
- Universal social protection systems and diversification of national economies in producing regions should be fostered, to limit negative effects of commodity price volatility and ensure redistribution of financial (and mineral) rents.

In recent years, a context marked by multiple crises, from Covid-19 to climate, have called into question the viability of the current financialized capitalist model at different scales. Addressing the negative consequences of financialization of global value chains will not be sufficient without simultaneously addressing the root causes of power asymmetries and inequalities leading to an extractivist model that ignores care for people and planet. While there is no shortage of ideas and policy solutions on how to advance systemic alternatives that are more equitable, inclusive and sustainable, it is crucial that policy makers and other political actors take concrete steps to advance their implementation.

#### References

- Aalbers, Manuel B. 2015. "The Potential for Financialization." *Dialogues in Human Geography*, 5(2):214–219.
- Adams, Zeno and Thorsten Glück. 2014. "Financialization in Commodity Markets: A Passing Trend or the New Normal?" Working Papers on Finance No. 2014/13. St. Gallen, Switzerland: University of St. Gallen, School of Finance.
- Aglietta, Michel. 2000. "Shareholder Value and Corporate Governance: Some Tricky Questions." *Economy and Society*, 29(1):146–159.
- Akyüz, Yılmaz. 2014. "Internationalization of Finance and Changing Vulnerabilities in Emerging and Developing Economies." Discussion Paper No. 217. Geneva: UNCTAD.
- Bagehot, Walter. 1873. Lombard Street: A Description of the Money Market (1 ed.). New York: Scribner, Armstong & Co.
- Bair, Jennifer. 2014. "Commodity Chains in and of the World-System" (Editor's Introduction to Peer-Reviewed Special Issue, 'The Political Economy of Commodity Chains'). *Journal of World-Systems Research* 20(1): 1–10.
- Bair, Jennifer. 2009. Frontiers of Commodity Chain Research. Stanford University Press.
- Bair, Jennifer and Gary Gereffi. 2003. "Upgrading, Uneven Development, and Jobs in the North American Apparel Industry." *Global Networks: A Journal of Transnational Affairs*, 3:143–169.
- Basak, Suleyman and Anna Pavlova. 2014. "A Model of Financialization of Commodities." Working paper. London: London Business School.
- Becker, Joachim, Johannes Jäger, Bernhard Leubolt and Rudy Weissenbacher. 2010. "Peripheral Financialization and Vulnerability to Crisis: A Regulationist Perspective." *Competition & Change*, 14:225–247.
- Bernard, Lucas, Alfred Greiner and Willi Semmler. 2012. "Agricultural Commodities and their Financialization." Amsterdam: Social Science Research Network (SSRN).
- Berne Declaration. 2011. Commodities: Switzerland's Most Dangerous Business. Zurich: Salis.
- Bresser-Pereira, Luiz Carlos. 2010. "The Global Financial Crisis and a New Capitalism?" The Levy Economics Institute, Working Paper No. 592. New York: Bard College.
- Bourdieu, Pierre. 1998. "L'essence du néoliberalisme." Le Monde Diplomatique, March.
- Bowman, Andrew. 2018. "Financialization and the Extractive Industries: The Case of South African Platinum Mining." *Competition & Change*, 22(4):388–412.
- Bridge, Gavin. 2008. "Global Production Networks and the Extractive Sector: Governing Resource-Based Development." *Journal of Economic Geography*, 8(3):389–419.
- Cheelo, Caesar, Marja Hinfelaar and Manenga Ndulo. 2022. *Inequality in Zambia*. Abingdon: Routledge.
- Chiapello, Eve. 2015. "Financialisation of Valuation." *Human Studies*, 38(1):13–35.
- Christian Aid. 2011. *Hungry for Justice: Fighting Starvation in an Age of Plenty*. London: Christian Aid.

- Coe, Neil, and Henry Wai-chung Yeung. 2015. *Global Production Networks: Theorizing Economic Development in an Interconnected World*. Oxford: Oxford University Press.
- Coles, Christopher and Jonathan Mitchell. 2011. *Gender and Agricultural Value Chains: A Review of Current Knowledge and Practice and Their Policy Implications*. ESA Working Paper No. 11. Rome: Food and Agriculture Organization (FAO).
- Davies, Matt. 2016. "Everyday Life as Critique: Revisiting the Everyday in IPE with Henri Lefebvre and Postcolonialism." *International Political Sociology*, 10(1):22–38.
- Davis, Graham A. and John E. Tilton. 2005. "The Resource Curse." *Natural Resources Forum*, 29(3):233–42.
- Diaz-Alejandro, Carlos. 1985. "Good-Bye Financial Repression, Hello Financial Crash." *Journal of Development Economics*, 19(1–2):1–-24.
- Dicken, Peter. 2007. *Global Shift: Mapping the Changing Contours of the World Economy*. Thousand Oaks, NJ: Sage.
- Dixon, Adam D. 2008. "The Rise of Pension Fund Capitalism in Europe: An Unseen Revolution?" *New Political Economy*, 13(3):249–270.
- Dobler, Gregor and Rita Kesselring. 2019. "Swiss Extractivism: Switzerland's Role in Zambia's Copper Sector." *The Journal of Modern African Studies*, 57(2):223–45.
- DW. 2021. "Nationalizing Zambia's Copper Mines," DW, 12 March. https://www.dw.com/en/nationalizing-zambias-copper-mines/a-56843152.
- EITI (Extractive Industries Transparency Initiative). 2020. Progress Report. Lusaka: EITI.
- EITI (Extractive Industries Transparency Initiative). 2017. Eighth Report for the Fiscal Year ended 31 December 2015. Lusaka: EITI.
- ECB (European Central Bank). 2011. Monthly Bulletin, October. Frankfurt: ECB.
- Elson, Diane. 2002. "International Financial Architecture: A View from the Kitchen." *Femina Politica*, 1:26–37.
- Epstein, Gerald. 2005. "Introduction: Financialization and the World Economy." In *Financialization and the World Economy*, edited by Gerald Epstein, 3–16. Cheltenham, United Kindom/Northampton, MA: Edward Elgar.
- Erturk, Ismail, Julie Froud, Sukhdev Johal, Adam Leaver and Karel Williams. 2007. "The Democratization of Finance? Promises, Outcomes and Conditions." *Review of International Political Economy*, 14(4):553–575.
- Evans, Alice. 2014. "Women Can Do What Men Can Do: The Causes and Consequences of Growing Flexibility in Gender Divisions of Labour in Kitwe, Zambia." *Journal of Southern African Studies*, 40(5):981–998.
- Farnworth, Cathy Rozel. 2011. *Gender-Aware Value Chain Development*. Accra: UN Women.
- Fessehaie, Judith and Mike Morris. 2013. "Value Chain Dynamics of Chinese Copper Mining in Zambia: Enclave or Linkage Development&quest." *The European Journal of Development Research*, 25(4):537–56.

- Fine, Ben. 2012. "Social Policy and Financialization". In *The Global Crisis and Transformative Social Change*, edited by Peter Utting, Shahra Razavi and Rebecca Buchholz, 103–122. Basingstoke: UNRISD/Palgrave.
- Frankel, Jeffrey A. 2010. "The Natural Resource Curse: A Survey." Working paper 15836. Cambridge, MA: National Bureau of Economic Research (NBER).
- French, Shaun, Andrew Leyshon and Thomas Wainwright. 2011. "Financializing Space, Spacing Financialization." *Progress in Human Geography*, 4:798–819.
- Fukuda-Parr, Sakiko, James Heintz and Stephanie Seguino. 2013. "Critical Perspectives on Financial and Economic Crises: Heterodox Macroeconomics Meets Feminist Economics." *Feminist Economics*, 19(3):4–31.
- Galbis, Vicente. 1976. "Structuralism and Financial Liberalization: An Analysis of Views on How to Integrate Capital Markets and Promote Financial Growth in Developing Countries." *Finance & Development*, 13(2):33–40. Washington, D.C.: International Monetary Fund (IMF).
- Garcia-Arias, Jorge. 2015. "International Financialization and the Systemic Approach to International Financing for Development." *Global Policy*, 6(1):24–33.
- Garrett, Ian, and Nick Taylor. 2001. "Portfolio Diversification and Excess Comovement in Commodity Prices." *The Manchester School*, 69(4):351–368.
- Gereffi, Gary. 1999. "A Commodity Chains Framework for Analysing Global Industries." *Institute of Development Studies*, 8(12):1–9.
- Gereffi, Gary. 1994. "The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks." In *Commodity Chains and Global Capitalism*, edited by Gary Gereffi and Miguel Korzeniewicz. Westport, CT: Praeger.
- Gereffi, Gary and Karina Fernandez-Stark. 2016. "Global Value Chain Analysis: A Primer." Durham, NC: Center on Globalization, Governance & Competitiveness, Duke University.
- Haile, Hanna. 2020. "The Gender Implications of Transformations in the Copper Value Chain: A Case Study of the Zambian Copperbelt". UNRISD Research Paper No. 2020-1. Geneva: UNRISD.
- Harvey, David. 2005. A Brief History of Neoliberalism. Oxford: Oxford University Press.
- Harvard Business School. 2018. "Data". *Behavioral Finance and Financial Stability Project*. Boston: Harvard Business School. https://www.hbs.edu/behavioral-finance-and-financial-stability/data/Pages/default.aspx.
- Hecht, Andrew. 2016. "Taking Delivery of Commodities via the Futures Market," The Balance, 9 December. https://www.thebalance.com/taking-delivery-of-commodities-via-the-futures-market-4118366.
- Hermele, Kenneth. 2013. "How Economists Understand (or not) the Relationship Between the Real and the Financial Economy." FESSUD Working Paper Series, No. 82. London: SOAS.
- Hertz, Ellen. 2000. "Stock Markets as 'Simulacra': Observation that Participates." *Tsantsa*, 5:40–50.

- Hertz, Ellen and Stefan Leins. 2012. "The 'Real Economy' and its Pariahs: Questioning Moral Dichotomies in Contemporary Capitalism." Society for Cultural Anthropology, 15 May. https://culanth.org/fieldsights/the-real-economy-and-its-pariahs-questioning-moral-dichotomies-in-contemporary-capitalism.
- Hess, Martin and Henry Wai-chung Yeung. 2006. "Whither Global Production Networks in Economic Geography? Past, Present and Future." *Environment and Planning A*, 38(7):1193–1204.
- Heumesser, Christine and Cornelia Staritz. 2013. "Financialisation and the Microstructure of Commodity Markets. A Qualitative Investigation of Trading Strategies of Financial Investors and Commercial Traders." Austrian Research Foundation for International Development (ÖFSE), Working Paper No. 44. Vienna: ÖFSE.
- Hilferding, Rudolf. 1910. Das Finanzkapital. Eine Studie zur jüngsten Entwicklung des Kapitalismus. Vienna: Verlag der Wiener Volksbuchhandlung Ignaz Brand & Co.
- Hinfelaar, Marja and Jessica Achberger. 2017. "The Politics of Natural Resource Extraction in Zambia." ESID Working Paper No. 80. Manchester: ESID.
- Hirschman, Albert O. 1981. *Essays in trespassing: Economics to politics and beyond.* Cambridge: Cambridge University Press.
- Hobi, Anna-Sophie. 2019. *Civil Society, Governance and Extractivism*. Unpublished MA thesis. Institute of Social Anthropology, University of Basel. Mimeo
- Hopkins, Terence and Immanuel Wallerstein. 1986. "Commodity Chains in the World Economy Prior to 1800." *Review (Fernand Braudel Center)*, 10(1):157–170.
- Hujo, Katja. 2012. "Introduction and Overview: Blessing or Curse? Financing Social Policies in Mineral-rich Countries." In *Mineral Rents and the Financing of Social Policy: Opportunities and Challenges*, edited by Katja Hujo, 3–25. Basingstoke: UNRISD/Palgrave.
- Hujo, Katja. 2004. Soziale Sicherung im Kontext von Stabilisierung und Strukturanpassung: Die Reform der Rentenversicherung in Argentinien. Frankfurt am Main: Peter Lang.
- Hujo, Katja. 2003. "Kapitalverkehrskontrollen als entwicklungspolitisches Instrument ist die chilenische Erfahrung eine Erfolgsgeschichte?" *Lateinamerika Analysen*, 6:3–37.
- Ing-Haw, Cheng and Wei Xiong. 2014. "Financialization of Commodity Markets." *Annual Review of Financial Economics*, 6:419–41.
- Jobst, Andreas. 2008. What is securitization? *Finance & Development*, September:48-49. Washington, D.C.: International Monetary Fund (IMF).
- Jolly, Richard, Giovanni Andrea Cornia, Diane Elson, Carlos Fortin, Stephany Griffith-Jones, Gerry Helleiner, Rolph van der Hoeven, Raphie Kaplinsky, Richard Morgan, Isabel Ortiz, Ruth Pearson and Frances Stewart. 2012. *Be Outraged: There Are Alternatives*. Brighton: Richard Jolly/Oxfam.
- Jürgens, Ulrich, Katrin Naumann and Joachim Rupp. 2000. "Shareholder Value in an Adverse Environment: The German Case." *Economy and Society*, 29(1):54–79.
- Kaplinsky, Raphael and Mike Morris. 2000. *A Handbook for Value Chain Research*. Ottawa, Canada: International Development Research Centre (IDRC).

- Kaufmann, Robert K. 2011. "The Role of Market Fundamentals and Speculation in Recent Price Changes." *Energy Policy*, 39(1):105–115.
- Kesselring, Rita. 2021. "Beware the Mineral Narrative: The Histories of Solwezi Town and Kansanshi Mine, North-Western Zambia, c. 1899-2020." In *Across the Copperbelt: Urban & Social Change in Central Africa's Borderland Communities*, edited by M. Lamer, E. Guene, B. Henriet, I. Peša and R. Taylor, 122–152. Woodbridge, United Kingdom: James Currey.
- Kesselring, Rita. 2018. "At an Extractive Pace: Conflicting Temporalities in a Resettlement Process in Solwezi, Zambia." *The Extractive Industries and Society*, 5(2):237–44.
- Kesselring, Rita, Stefan Leins and Yvan Schulz. 2019. "Valueworks: Effects of Financialization along the Copper Value Chain." Working Paper. Geneva: Swiss Network for International Studies (SNIS).
- Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Keynes, John Maynard. 1924. A Tract on Monetary Reform. London: Macmillan.
- Koch, Natalie and Tom Perreault. 2019. "Resource Nationalism." *Progress in Human Geography*, 43(4):611–631.
- Köhler, Gabriele. 2015. "Seven Decades of 'Development,' And Now What?" *Journal of International Development*, 27:733–751.
- Kornai, János. 1980. "'Hard' and 'Soft' Budget Constraint." *Acta Oeconomica*, 25(3/4):231–245.
- Kregel, Jan. 2004. "External Financing for Development and International Financial Instability." UNCTAD G-24 Discussion Paper No. 32. New York/Geneva: UNCTAD.
- Krippner, Greta R. 2011. *Capitalizing on Crisis. The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press.
- Krippner, Greta R. 2005. "The Financialization of the American Economy." *Socio-Economic Review*, 3:173–208.
- Langley, Paul. 2008. *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*. Oxford: Oxford University Press.
- Lapavitsas, Costas. 2009. "Financialised Capitalism: Crisis and Financial Expropriation." Historical Materialism, 17:114–148.
- Lazonick, William and Mary O'Sullivan. 2000. "Maximizing Shareholder Value: A New Ideology for Corporate Governance." *Economy and Society*, 29(1):13–35.
- Lavinas, Lena. 2016: "How Social Developmentalism Reframed Social Policy in Brazil." desiguALdades.net Working Paper Series 94. Berlin: desiguALdades.net International Research Network on Interdependent Inequalities in Latin America.
- Mader, Philip, Daniel Mertens and Natascha Van der Zwan. 2020. "Financialization: An Introduction." In *The Routledge International Handbook of Financialization*, edited by Philip Mader, Daniel Mertens and Natascha van der Zwan, 1–16. Abingdon: Routledge.

- Mayer, Jörg. 2012. "The Growing Financialisation of Commodity Markets: Divergences between Index Investors and Money Managers." *The Journal of Development Studies*, 48(6):751-767.
- Martin, Randy. 2002. Financialization of Daily Life. Philadelphia: Temple University Press.
- Marx, Karl. 1894. Capital. Volume III. London: Penguin Books, 1981.
- McKinnon, Ronald I. 1973. *Money and Capital in Economic Development*. Washington, D.C.: Brookings Institution Press.
- Milberg, William. 2008. "Shifting Sources and Uses of Profits: Sustaining US Financialization with Global Value Chains." *Economy and Society*, 37(3):420–451.
- Minsky, Hyman P. 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.
- Morgan, Glenn. 2014. "Financialization and the Multinational Corporation." *Transfer: European Review of Labour and Research*, 20(2):183–197.
- Musonda, James. 2021. "Modernity on Credit: The Experience of Underground Miners on the Zambian Copperbelt." *Journal of Southern African Studies*, 47(3):1–16.
- Nasdaq. 2021. *Copper: Historical Data*. https://www.nasdaq.com/market-activity/commodities/hg:cmx.
- Nchito, Wilma. 2018. "Infrastructure in Solwezi: Can the Copperbelt be Replicated?" SNIS Valueworks: Effects of Financialization along the Copper Value Chain, Working Paper. Mimeo.
- Neely, Megan. 2022. "Keep it in the Family: Inequality in Access to Capital on Wall Street." In *Between Fault Lines and Frontlines: Shifting Power in an Unequal World*, edited by Katja Hujo and Maggie Carter. London: Zed/Bloomsbury.
- Newman, Susan A. 2009. "Financialization and Changes in the Social Relations along Commodity Chains: The Case of Coffee." *Review of Radical Political Economics*, 41(4):539–559.
- Ocampo, José Antonio. 2014. "Reforming the International Monetary and Financial Architecture." Dialogue on Globalization Series, Friedrich-Ebert-Stiftung (FES). Geneva: FES.
- Ortiz, Horacio. 2014. "The Limits of Financial Imagination: Free Investors, Efficient Markets and Crisis." *American Anthropologist*, 116(1):38–50.
- Palley, Thomas I. 2007. "Financialization: What It Is and Why It Matters." The Levy Economics Institute Working Paper No. 525. New York: Bard College.
- Pellandini-Simányi, Léna, Ferenc Hammer and Zsuzsanna Vargha. 2015. "The Financialization of Everyday Life or the Domestication of Finance?" *Cultural Studies*, 29:5–6.
- Peša, Iva. 2020a. "Mining, Waste and Environmental Thought on the Central African Copperbelt, 1950-2000." *Environment and History*, 28(2): 259–284.
- Peša, Iva. 2020b. "Between Waste and Profit: Environmental Values on the Central African Copperbelt." *The Extractive Industries and Society*, 8(4).
- Perrons, Diane. 2021. Is Austerity Gendered? Hoboken, NJ: Wiley.

- Phillips, Nicola. 2017. "Power and Inequality in the Global Political Economy." *International Affairs*, 93(2):429–444.
- Polanyi Levitt, Kari. 2008. *The Great Financialization*. Lecture delivered at the Progressive Economics Forum of Canada upon receipt of the John Kenneth Galbraith Prize, June 2008. https://www.progressive-economics.ca/2008/09/kari-levitts-jkg-lecture/.
- Pollard, Jane. 2013. "Gendering Capital: Financial Crisis, Financialization and (an Agenda for) Economic Geography." *Progress in Human Geography*, 37(3):403–23.
- Purcell, Thomas F. 2018. "Hot Chocolate: Financialized Global Value Chains and Cocoa Production in Ecuador." *Journal of Peasant Studies*, 45(5–6):904–926.
- Riisgaard, Lone, Anna Maria Fibla and Stefano Ponte. 2010. *Gender and Value Chain Development*. Copenhagen: Danish Institute for International Studies.
- Riese, Hajo. 1996. "Kann sich die Realwirtschaft von den Finanzmärkten abkoppeln? Das monetäre Fundament des Keynesianismus." In *Haben sich die Finanzmärkte von der Realwirtschaft abgekoppelt? Impulse einer Fachkonferenz*, edited by F. Hengsbach, and B. Emunds, 35–49. Frankfurt: Oswald-von-Nell-Breuning-Inst. für Wirtschaftsund Gesellschaftsethik.
- Rosser, Andrew. 2006. "The Political Economy of the Resource Curse: A Literature Survey." Institute of Development Studies (IDS), Working Paper No. 268. Sussex: IDS.
- Saad-Filho, Alfredo and Deborah Johnston. 2005. *Neoliberalism: A Critical Reader*. London: Pluto Press.
- Sahay, Ratna, Martin Čihák, Papa N'Diaye, Adolfo Barajas, Ran Bi, Diana Ayala, Yuan Gao, Annette Kyobe, Lam Nguyen, Christian Saborowski, Katsiaryna Svirydzenka and Seyed Reza Yousefi. 2015. "Rethinking Financial Deepening: Stability and Growth in Emerging Markets." IMF Staff Discussion Note. Washington, D.C.: IMF.
- Schubert, Jon, Ulf Engel and Elísio Macamo. 2018. Extractive Industries and Changing State Dynamics in Africa: Beyond the Resource Curse. New York: Routledge.
- Shaw, Edward S. 1973. Financial Deepening in Economic Development. New York: Oxford University Press.
- Sokol, Martin. 2017. "Financialisation, Financial Chains and Uneven Geographical Development: Towards a Research Agenda." *Research in International Business and Finance*, 39:678–685.
- Stockhammer, Engelbert. 2012. "Financialization, Income Distribution and the Crisis." *Investigación Económica*, 71:39–70.
- Sturgeon, Timothy J. 2000. "How Do We Define Value Chains and Production Networks?" Background paper prepared for the Bellagio Value Chains Workshop. Bellagio, Italy.
- Svampa, Maristella. 2019. *Neo-Extractivism in Latin America: Socio-Environmental Conflicts, the Territorial Turn, and New Political Narratives*. Cambridge: Cambridge University Press.
- Tang, Ke and Wei Xiong. 2010. "Index Investment and Financialization of Commodities." National Bureau of Economic Research (NBER), Working Paper 16385. Cambridge, MA: NBER.

- UN (United Nations). 2015. Transforming Our World: The 2030 Agenda for Sustainable Development. New York: United Nations.
- UNCTAD (United Nations Conference on Trade and Development). 2020. *Trade and Development Report From Global Pandemic to Prosperity for All: Avoiding Another Lost Decade*. Geneva: UNCTAD.
- UNCTAD (United Nations Conference on Trade and Development). 2017. "The Missing Link Between Economic Growth and Development: The Case of Copper-Dependent Zambia." Background document to the Commodities and Development Report 2017. Geneva: UNCTAD.
- UNCTAD (United Nations Conference on Trade and Development). 2015. *Trade and Development Report*. Geneva: UNCTAD.
- UNCTAD (United Nations Conference on Trade and Development). 2012. "Don't blame the physical markets: Financialization is the root cause of oil and commodity price volatility." UNCTAD Policy Brief No. 25. Geneva: UNCTAD.
- UNCTAD (United Nations Conference on Trade and Development). 2011. *Price Formation in Financialized Commodity Markets*. Geneva: UNCTAD.
- UNDP (United Nations Development Programme). 2019. *Human Development Report 2019* Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century. New York: UNDP.
- UNRISD (United Nations Research Institute for Social Development). 2016. *Policy Innovations for Transformative Change: Implementing the 2030 Agenda for Sustainable Development*. Geneva: UNRISD.
- UNRISD (United Nations Research Institute for Social Development). 2012. "Mineral Rents and the Financing of Social Policy." Research and Policy Brief No. 16. Geneva: UNRISD.
- UNRISD (United Nations Research Institute for Social Development). 2010. *Combating Poverty and Inequality. Structural Change, Social Policy and Politics*. Geneva: UNRISD.
- Utting, Peter, Shahra Razavi and Rebecca Buchholz. 2012. *The Global Crisis and Transformative Social Change*. Basingstoke: UNRISD/Palgrave.
- Van der Zwan, Natascha. 2020. "Patterns of Pension Financialization in Four European Welfare States." *Revista Internacional de Sociología*, 78(4):175.
- Van der Zwan, Natascha. 2014. "Making Sense of Financialization." *Socio-Economic Review*, 12(1):99–129.
- Williams, Karel. 2000. "From Shareholder Value to Present-day Capitalism." *Economy and Society*, 29(1):1–12.
- World Bank. 2021a. *Global Financial Development Database*. Washington, D.C.: The World Bank. https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database.
- World Bank. 2021b. Zambia Country Overview. Washington, D.C.: The World Bank.
- World Bank. 2021c. Commodity Markets Outlook. Washington, D.C.: The World Bank.

- World Bank. 2001. *Finance for Growth*. Policy Research Report. Washington, D.C.: The World Bank.
- World Bank. 1989. World Development Report: Financial Systems and Development. Washington, D.C.: The World Bank.
- Yeung, Henry Wai-chung and Neil Coe. 2015. "Toward a Dynamic Theory of Global Production Networks." *Economic Geography*, 91(1):29–58.
- Young, Brigitte. "Financialization, Unconventional Monetary Policy and Gender Inequality." In *Handbook on the International Political Economy of Gender*, edited by Juanita Elias and Adrienne Roberts, 241–251. Cheltenham, United Kingdom: Edward Elgar.
- Zalewski, David A. and Charles J. Whalen. 2010. "Financialization and Income Inequality: A Post Keynesian Institutionalist Analysis." *Journal of Economic Issues*, 44(3):757–777.