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Article

A Survey of Inclusive Growth Policy

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Abstract: *Background:* Since the latter part of the 20th Century, countries have been particularly challenged by the trade-off that exists between delivering generous welfare provisions and strong economic growth. Such dynamics have stimulated a need to better understand the causes of income inequality so as to better formulate policies that foster inclusive growth and reduce growing concerns surrounding income inequality. *Method:* Given its ability to succinctly summarize, analyze, and synthesize an extant body of literature from a certain genre of scholastic endeavor, this study utilizes a literature review as its proposed methodological approach. *Results:* From our assessment of the literature, we identified four key areas that contribute significantly to income inequality in both advanced and developing economies, these include: (i) pursuing skill-biased technological change; (ii) enhancing education systems; (iii) consolidation of globalization; and (iv) reform of the labor market and its relevant institutions. *Conclusion:* There is no silver bullet to achieving inclusive growth. Any policy manifesto must seek to offer a coordinated policy platform that looks to deal directly with the causes of inequality. In order to do so, consideration should be given to a range of policy areas including fiscal, education, trade liberalization, and labor market reforms.

Keywords: income inequality; poverty reduction; equity; inclusive growth; fiscal policy; developing Asia; advanced welfare economies

JEL Classification: D63; E62; I32; I38; J68; O47; P46

1. Introduction

A key macroeconomic objective discussed in recent decades has been the promotion of fair and equitable economic growth (Aoyagi and Ganelli 2015). The widening income gap between the rich and the poor, within and between countries, has stimulated a need to better understand the root causes of inequality and construct policy initiatives that are able to narrow the income gap effectively. As such, a series of fiscal policy measures designed to tackle growing income inequality has been introduced (Asian Development Bank 2014). When left unchecked, widening income inequality can undermine the comparative strength of economies, which can create political and social unrest within a country (Stiglitz 2012; Asian Development Bank 2014; Stiglitz 2016). Furthermore, increases in inequality can weaken consumption levels in a way that sees those at the top spend a smaller percentage of their income than poorer segments of society (Stiglitz 2016). Depending on a country's economic growth pattern, welfare system, and level of fiscal constraint, its government can select relevant fiscal policies that utilize a range of economic measures, including mainly tax and benefit systems to reduce inequality and its negative effects.

To date, there has been much research on income inequality and its link with economic growth (Son and Kakwani 2003; Berg and Ostry 2011). Many scholars view economic growth as a mechanism

that, despite increasing income inequality during the initial stages of growth, can reduce poverty levels over the longer term (Son and Kakwani 2003; Bourguignon 2004; Partridge and Rickman 2008; Dollar et al. 2013). However, stagnant economic development in the long-term can increase income inequality, which in turn fuels public debate on social welfare policy and its distributive effects. In addition to this, other studies have sought to better understand the relationship between inclusive growth, which is defined by the [Organization for Economic Cooperation and Development \(OECD\)](#) as economic growth that is distributed fairly across society and creates opportunities for all, as well as its potential ability to reduce the widened income gap that exists between high- and low-skilled jobs (Lee and Sissons 2016), with this particular issue further highlighting the need to distribute the gains of economic development in an equitable manner. In order for growth to be sustainable and effective at reducing poverty and inequality, it needs to be inclusive (Berg and Ostry 2011). For countries of all economic development levels, the ability to foster growth equitably is a top policy priority (Bowman 2007).

Developed countries are challenged by the trade-off between welfare provisions and strong economic growth. This issue has stimulated a need to better understand the causes of income inequality, so as to better formulate policies that foster inclusive growth and to reduce levels of growing inequality. This research utilizes a literature review as its methodological approach, to investigate the issue of inclusive growth. Inclusive growth refers to the distribution of growth and fairness and not necessarily the level of growth. Four key areas that contribute to income inequality in both advanced and developing economies are identified. These include: pursuing skill-biased technological change; enhancing the capabilities of education systems; the consolidation of globalization; and labor market reforms. The results of our review suggest that any policy must deal directly with the causes of inequality. In particular, consideration should be given to a range of policy and extended research evaluation areas including fiscal policy, investment in education, trade liberalization, and labor market reforms. In order to develop a better understanding of this issue, our study seeks to answer two key questions.

RQ1: What are the key factors that increase income inequality?

RQ2: Which policy initiatives have been utilized by governments as a means of successfully tackling income inequality?

The rest of this study is organized as follows. In Section 2, we discuss the methodological approach adopted for this study and its key benefits as a means of enquiry. In Section 3, we review the literature that documents the determining factors of income inequality. Section 4 examines the fiscal policy measures that have been implemented by countries and their ability to impact income inequality and growth. Finally, Section 5 draws relevant conclusions and areas of potential analysis.

2. Methodological Approach

In order to conduct a thorough analysis on the issue of income inequality and its link with economic growth, this study pursued an integrative literature review as its chosen analytical approach. Our choice to adopt such a method reflects the fact that as the topics of income inequality and growth develop and mature, there is a corresponding need to review and critique these specific fields on research (Torraco 2005).

An integrative literature review is a specific form of research that seeks to both categorize information about a particular area of study, but also to create new knowledge about topics reviewed (Torraco 2005, 2016). In addition to this, literature reviews are well recognized for their ability to succinctly summarize, analyze, and synthesize an extant body of literature from a certain genre of scholastic endeavor (Chermack and Passmore 2005). Furthermore, because literature reviews provide an effective means of generating a detailed analysis on topics that may include inconsistencies or contradictions in the extant literature, this study chooses to utilize such an approach (Torraco 2005, 2016). This literature review follows the guidelines stipulated in Torraco (2005). Firstly, a critical analysis is conducted by examining the main ideas and relationships of an issue and providing a critique of

existing literature on income inequality and the factors that help to create it. The choice of method is motivated by its enabling to review critically the relevant articles identified through searches from multiple databases to infer the stated link. Secondly, a synthetization of new knowledge on the topic was conducted, from which a series of key discussion points were elaborated. In addition to this, two forms of synthesis, a new fiscal policy framework and research agenda, are developed.

Based on the guidelines of [Torraco \(2005, 2016\)](#) integrative literature review, our study begins by searching for and selecting relevant articles in the existing literature. In addition, given that conducting a clear and specific selection process in the literature review is pivotal, this study gives consideration to (a) where the articles were discovered (i.e., databases), (b) when the search was implemented, and (c) why the articles were ultimately chosen ([Callahan 2010](#)). To this end, the articles used in this study were sourced from initial searches through multiple ProQuest databases, which encompassed 43 subsets of databases (such as ABI/INFORM Collection and Social Science Premium Collection, amongst others) and other online searches to discover relevant articles. With regard to keyword combinations, the primary focus of this study was to examine the ways in which inclusive growth can be achieved. As a consequence, our study conducted searches using the following keywords: income inequality; poverty reduction; inclusive growth; inequality and globalization; inequality and educational reform; fiscal policy; minimum wage and poverty; labor market reforms, and advanced welfare economies were used. From the subsequent searches, our review not only categorizes, analyzes, summarizes, and synthesizes the information, but also helps to create new knowledge of the drivers of inequality and a basis from which a new fiscal policy framework and research agenda can be developed.

3. Results

3.1. Income Inequality

Using an integrative literature review, our study sought to address two primary research questions, the first of which is:

RQ1: What are the key factors that increase income inequality?

From a detailed assessment of the literature, our research identified four factors that can contribute to income inequality, and these include: (i) skill-biased technological change (SBTC) and polarization; (ii) education; (iii) globalization; and (iv) labor market institutions.

3.1.1. Skill-Biased Technical Change and Polarization

The question of whether productivity levels should determine a worker's earning potential has been the center of much income inequality research. One of the predominant views behind growing inequality, has been an increase in demand for high-skilled labor, while demand for low-skilled work has declined ([Chu et al. 2015](#)). This growing disparity in labor demand and SBTC reflects the reality of technological progress, in which those who have a greater understanding of new technologies are more often than not associated with higher income and better-educated segments of the population ([Asian Development Bank 2014](#)). However, [Card and DiNardo \(2002\)](#) and their U.S. labor market study challenge this view, noting that SBTC fails to explain the evolution of other dimensions of wage inequality in gender and racial wage gaps and the age gradient associated with a return to education. They challenged the previous framework on SBTC studies (e.g., [Bound and Johnson 1992](#); [Berman et al. 1994](#); [Autor et al. 1999](#)) by arguing that they ignored the differences in the path of technological change across industries. Furthermore, in comparing wage inequality in the U.S. and Germany, [Antonczyk et al. \(2010\)](#) found the existence of an elevating increase in earning inequality in rural areas between 1979 and 2004, with the interaction of SBTC and a range of institutional factors helping to explain the irregular inequality trends that occurred across the two countries.

In addition to this, other research has examined the pressing issue of the top income earners' share of total income. In this instance, [Gordon and Dew-Becker \(2008\)](#) provided a comprehensive

survey of the increase in American inequality since 1970. The results from this study show that SBTC is able to explain the growing dominance of the top one percent. Their central argument is that workers employed within the top and bottom income groups rarely see their jobs outsourced, while the elasticity of substitution that occurs in the middle income group is much more prevalent. In an earlier study, [Piketty and Saez \(2001\)](#) sought to provide a new justification for the movements associated with the top U.S. income earners over the 1913–1998 period. From this analysis, a U-shaped pattern was observed that indicated that “technical change” alone cannot fully explain the cause and characteristics of the growing income inequality gap. In particular, the significant shocks experienced by capital owners during the Great Depression and World War II seemed to have a permanent effect on income inequality, with progressive taxation policies and a reduction in the rate of wealth accumulation for those at the top of the distribution acting as plausible explanations for the slow recovery rate from these shocks; while [Atkinson and Leigh \(2010\)](#) found that the share of income for the highest income earners fell in the three decades following World War II, before rising sharply from the mid-1970s onwards. More recently, [Atkinson and Morelli \(2012\)](#) drew similar conclusions, in which they found that the share of top income earners fell from 1914 until the 1970s; however, in the years since then, their proportion of wealth has more than doubled.

The issue of income polarization is also an important area of discussion; defined as the process in which income concentrates into two different groups, usually one rich, and another poor. The rising income polarization is usually due to the declining of the middle income class due to SBTC ([Alichi et al. 2016](#)). There have been a number of studies on this issue, including [Alichi et al. \(2016\)](#), and [Kenworthy and Smeeding \(2013\)](#), in which they address the new phenomenon of income inequality trends in the U.S. These embrace an increasing trend of polarization between the two political parties and the enhanced political influence of the rich on the shaping of fiscal policy. Marco (2017) and [Walks \(2013\)](#) dealt with the methodology issues on measuring income polarization. In particular, [Walks \(2013\)](#) identified various approaches to measuring income inequality and income polarization.

More recently, [Wu and Li \(2018\)](#) conducted a longitudinal study on household income variation of nationally-representative data obtained using the Panel Study of Income Dynamics (PSID), which is the world’s longest running household panel survey and has included some 13.78 million American families since 1968. The results from this study showed that while income mobility in the U.S. has remained stable, the issue of income volatility, which measures the instability of incomes, has increased considerably, creating a surge of income inequality. Such increases in volatility are associated with the plummeting of income-growth opportunity and a growing sense that the American Dream is in decline. In conclusion, although the literature discussed to date does provide some counter arguments in terms of the “extent of the impact”, most of the SBTC studies conducted have shown that SBTC can explain, at least to a certain extent, some of the recent trends in growing income inequality.

3.1.2. Education

The issue of education has been identified as having an important relationship with income inequality. As such, the development and expansion of educational opportunities is often seen as an important policy instrument for dealing with rising income inequality. In addition to this, education expansion is also seen as an important mechanism for promoting economic growth ([Barro 2013](#)) and dismantling intergenerational poverty, which in turn reduces future income inequality ([Coady and Dizioli 2017](#)). To this end, several studies have helped to highlight the supportive role education plays in reducing income inequality. [Sylwester \(2002\)](#) empirically assessed whether additional government spending on education can influence the income distributive effect within a country. Focusing on both OECD and non-OECD nations, the results demonstrated that increased expenditure for education clearly reduces income inequality, particularly in high-income countries. Meanwhile, [Manafi and Marinescul \(2013\)](#) explored the influence of investment in training in the EU by using various macroeconomic indicators that were grouped into three clusters based on labor market regulations and unemployment levels. From their study, it was found that governments, by investing

more in lifelong learning and training programs, are better placed to help their workers better adapt to the needs of a shifting labor market and as such help to reduce inequality. In a more recent study, [Coady and Dizioli \(2017\)](#) examined the implications of changing education outcomes for income inequality for a range of developed and developing countries for the 1990–2005 period. Their study showed that, although the magnitude of the net impact on income inequality varies across emerging and developing economies, income inequality is always reducing. However, [Coady and Dizioli \(2017\)](#) showed that while the net effect of education expansion decreases income inequality in all regions, increases in years spent in education in advanced economies was found to have a regressive effect on income equality.¹

The [Coady and Dizioli \(2017\)](#) finding is supported by a number of other studies, which highlight the ability for education to increase income inequality in the developed world. In this regard, the [Checchi \(2000\)](#) study, which examined both OECD and non-OECD nations, found a strong negative relationship between average years of schooling and income inequality. In addition, Checchi showed that income inequality is also negatively correlated with per capita income and positively associated with capital/output ratio and government expenditure on education, a finding that is particularly apparent in more developed OECD nations. Subsequent to this, a U.S.-based study by [Hendel et al. \(2005\)](#) showed that by reducing interest rates and the financial constraints that impact postsecondary education, governments can inadvertently increase wage gaps and income inequality. In other U.S.-based studies, [Armstrong and Hamilton \(2013\)](#), [Mettler \(2014\)](#), and [Goldrick-Rab \(2016\)](#) showed how privatization of the U.S. higher education sector has contributed to higher productivity and growth, as well as reduced inequality.

3.1.3. Globalization

In today's increasingly globalized world, many researchers have sought to ascertain the impact that globalization may have on income inequality. At the epicenter of the political debate, much of the blame for the rise in inequality has been given to globalization ([Qureshi 2018](#)). From a neoliberal perspective, [Gordon and Dew-Becker \(2008\)](#) found, in their analysis of the U.S. economy policy, that a liberalized trade agenda produces income growth that is unequal in its distribution to society. This is because the globalized nature of the market sees low-paid foreign workers in direct competition with domestic workers, and given the rigors of greater import penetration, domestic industries are forced into reducing wage levels in order to remain competitive. Outside of the U.S., [Bergh and Nilsson \(2010\)](#) examined whether trade openness and economic freedom help to shape income inequality within a country. From their analysis of 80 countries, over the 1970–2005 period, they found that middle- and high-income country policy reforms that favored trade openness were on average helping to amplify and worsen income inequality in recent decades.

In terms of labor, [Atkinson \(2007\)](#) examined whether the increase in the relative demand for skilled labor and the growing exposure of unskilled workers during the process of globalization has been a contributing factor behind the increase in income inequality for OECD countries since 1980. In this study, it is argued that no single explanation can successfully explain not only the earning inequality that exists across countries but also the degree to which income is distributed amongst those at the top. As such, Atkinson suggests a new approach should be taken that examines the race between technology and education and their respective influence on inequality.

In a model with two factors, for example skilled and unskilled labor, as countries promote freer trade, the relative prices of skill-intensive goods will rise in skill-rich countries, and fall in skill-poor countries. As this happens, Stolper and Samuelson predict a rise in skilled wages and a fall (absolute, as

¹ [Coady and Dizioli \(2017\)](#) simulated the effect of education on countries with different economic levels. From their research, they showed that the education effect in income inequality is not homogeneous at all economic levels. Their empirical result showed that education expansion is more important for developing countries than it is for developed countries. In an advanced economy, the more years spent in education, the greater the positive effect it had on income inequality.

well as relative) in unskilled wages in the skill-rich countries. Baldwin (2017) argued that globalization had very uneven effects across the global income distribution. The study concluded that globalization's impact is due to international knowledge flows, as well as trade flows, with middle- and high-income groups doing well, while the poorest segments of society and those at the lower end of the income scale in rich nations suffered most. Meanwhile, Autor et al. (2013) found that the impact on wage levels for those with lower education backgrounds was higher, while a sharp increase in wage inequality and falls in the real wages for low-education workers in the U.S. and other developed countries were not the same, but were closely related to a country's level of trade openness (Autor et al. 2016).

Known as "the elephant chart", Lakner and Milanovic (2013) showed how globalization improves income levels of the low income group, in countries such as China and India, while having a negative impact on the middle income groups from the U.S. and the EU. They also argued that the most significant increases in income occurred among groups at the top-end of income levels. Finally, a recent Organization for Economic Cooperation and Development (OECD) study found that the globalization of technology and information, trade, finance and investment, and international migration flows have all helped to increase income inequality. In particular, the globalization of technology and information flows have been identified as having the greatest impact. The results of technological change have meant that people with lower levels of education are in growing danger of seeing their jobs replaced by technology; while on the other hand, those with high-level skills are well positioned to utilize these new technologies and are therefore reaping the rewards of greater educational achievement. However, in direct contrast to the OECD findings and others, Agnello and Sousa (2012) showed, in their study of 18 high-income industrialized countries over the 1978–2009 period, that an increase in the degree of trade openness has helped to foster greater equality because its effects have helped to promote a more equal distribution of income. More recently, Stockhammer (2013) showed that technological change has brought about a positive influence on wage shares in developing economies, but a negative influence in advanced economies, while the forces of globalized production have been shown to have extensive negative effects, even in developing economies.

3.1.4. Labor Market Institutions

The institutional component of the labor market has also been of particular interest, with several key studies examining the issue and its impact on income inequality. In this regard, Hendel et al. (2005) specifically focused on the ways in which labor market institutions affect inequality; in particular, how specific labor market components simultaneously affect both relative wages, the trade union movement, the unemployment rate, and as a consequence of this, the distribution of personal incomes. Their results showed that while a higher minimum wage decreases inequality, it also led to high unemployment; a key determinant of income inequality. In a subsequent OECD study, Checchi and Garcia-Peñalosa (2008) discovered that a high degree of wage bargaining coordination on behalf of strong unionized conditions leads to increases in income inequality. However, in contrast, Gordon and Dew-Becker (2008) found quantitative evidence to suggest that unionization plays only a minor role in the inequality debate, with gender difference being a more important contributor.

In other studies, Sologon and O'Donoghue (2009) estimated the impact of labor market policies and institutional factors on earning mobility from an EU perspective. In their study, unionization was found to increase earning mobility, with relatively high unemployment benefits implying a relatively low willingness to accept a lower paid job, which in turn helps to improve income inequalities. Rada and Kiefler (2013) supported such an assertion in their study of 13 OECD countries, in which unionization was found to have a pro-labor effect and as such help to reduce inequality. Moreover, Garcia-Peñalosa (2010) found that solid labor market institutions not only reduce inequality, but also increase employment and economic growth; a finding that was supported in a recent World Bank (2018) study, which highlighted how the creation of skilled jobs for the poor and stimulating growth by increasing competition, policy certainty, and the promotion of skilled migration would help to reduce inequality in the developing world.

3.1.5. Non-Linear Considerations of Key Findings

In concluding our key findings, it should be noted that the four factors identified to contribute to income inequality included: skill-biased technological change and income polarization, the expansion of educational opportunities, globalization and income growth, and labor market policies and institutions. While the literature assessed in our study focuses mainly on their direct individual effects, it is important to bear in mind that each factor may have non-linear, indirect, and interactive effects. For example, globalization and income growth can be enhanced by the types of labor market policies adopted by governments, which can in turn also lead to the expansion of educational opportunities. Moreover, as [Moore and Ranjan \(2005\)](#) showed, skill-based technological change and globalization have similar implications for inequality, but may have different implications for labor market conditions and unemployment. Despite such issues, we contend that our integrative literature review study makes an important contribution to extending knowledge and understanding of the key causes of income inequality.

4. Discussion: Government Policy Initiatives

Economists have increasingly focused on the links between rising inequality and the fragility of growth. In order to achieve growth objectives, countries have sought to achieve more inclusive equitable means of growth. From our analysis of the literature, skill-biased technological change, education, globalization, and labor market institutions are key contributing factors to reduce income equality and growth. In this section, we identify the appropriate means by which governments can tackle the problem and generate more inclusive growth. In order to address this concern, the following research question is asked.

RQ2: Which policy initiatives have been utilized by governments as a means of successfully tackling income inequality?

An analysis of the empirical literature showed that direct income tax and monetary transfers have often been used by advanced economies as a means of tackling income inequality through the development of more inclusive means of growth.

4.1. Fiscal Policy

4.1.1. Redistributive Effect

In order to combat increasing income inequality and drive inclusive growth, many economies have implemented a range of sophisticated fiscal policies. These fiscal policies have been shown to provide both distributive and progressive effects. However, their ability to manage this increasingly concerning facet of societal development has drawn mixed results.

In assessing the effects of U.S. government expenditure and taxation on households between 1989 and 2000, [Wolf and Zacharias \(2007\)](#) stated that overall income inequality declined significantly as a result of increases in net government expenditure. In addition, [Kitao \(2010\)](#) tested whether temporary fiscal policy, tax cuts, and rebate transfer can enhance an economic recovery from a U.S. perspective. As tax cuts can help to provide an immediate incentive to work, their effect can lead to an increase in aggregate output and consumption. Kitao showed that both tax cuts and rebate transfers improve the overall welfare of households, with rebate transfers providing significant additional benefits to low-income households in a manner that creates greater equity in the marketplace. From a U.S. context as well, [Thompson and Smeeding \(2013\)](#) examined the trends in inequality and poverty using market and after-tax and transfer income during and after the Great Recession. Using market-based income, they found that tax and transfer policies blunted much of the increase in poverty and some of the rise in income inequality that would have otherwise been experienced during the Great Recession. These anti-poverty policies, however, were most effective for older households and for families with children. In the economic crisis of 2008, U.S. government measures did not have the same effect across

the population (Thompson and Smeeding 2013). In this regard, poverty levels declined among the elderly, changed little among children, and rose sharply among the working-age, while inequality fell across the total population, but there was no change among working-age households (Thompson and Smeeding 2013).

In another study, Atkinson and Leigh (2010) used taxation data to create the distribution of top incomes covering five Anglo-Saxon countries of relatively similar backgrounds and tax systems. From their analysis, they found that a reduction in the marginal tax rate on wage and investment incomes increased the relative share of the top percentile group of income earners; while Garcia-Garcia-Peñalosa and Turnovsky (2011) examined the impact that recent U.S. and EU tax changes have had on the dynamics of income distribution. As these tax changes can affect working hours and the relevant income distributions, it is plausible that any supposed benefit may be out-weighted by the redistributive impact of taxes themselves. As part of their assessment, Garcia-Peñalosa and Turnovsky found that when taking into consideration the financing of government expenditure, the policies that reduce labor supply and output the most also lead to a more equal distribution of after-tax income.

Meanwhile, Muinelo-Gallo and Roca-Sagalés (2011) examined the impact that different fiscal policy instruments had on economic growth and income inequality for 43 upper-middle- and high-income countries over the 1972–2006 period. They showed that increases in public investment provided a distributive effect without harming output. Moreover, an increase in both expenditure and direct taxes, despite having an initial regressive impact, did help to reduce income inequality overall. In other works, Bargain (2012) applied micro-simulations, in a United Kingdom (U.K.) context, to quantify the relative effects of fiscal policy. The results here showed that both income inequality and poverty levels increased in instances where income support and tax credit reform were not implemented. Furthermore, Silva et al. (2013) showed in their EU-based study that during a period of economic recession, the public spending multiplier had a positive impact on inequality, whereas during a high inflation period, it was smaller and perhaps even negative.

Furthermore, in an effort to understand the impact of fiscal policy on EU countries, Crudu (2015) examined the role the tax system played in reducing inequality in the region. In this instance, the results showed a direct correlation between the level of taxation and inequality, whereby countries that had the highest tax revenue (as a share of GDP) also recorded the highest decreases in income inequality (as expressed by the Gini coefficient). A recent Organization for Economic Cooperation and Development (OECD) study also highlighted the important role taxes play in redistributing wealth. Tax credits are an example of this, with many low-paid workers from the U.S. receiving this form of benefit. From a policy perspective, the study also documented the significant impact that non-cash transfers (such as spending on education and healthcare) have on reducing inequality. This finding was supported in subsequent work by Bourguignon (2018), which reiterated the important role that redistributive policies could also help narrow the gap between rich and poor in countries with high inequality, particularly where social and political tensions or the rise of populist regimes might prove bad for growth in the long run.

4.1.2. Impact on Growth

Increases in government revenue that occur as a result of economic growth allow the government to employ policies that promote job growth and benefits in kind tax policies. However, the burden of fiscal consolidation can be rather regressive and less distributive. In a comprehensive study by Carrère and Melo (2012), a cross-country analysis was provided of the correlation between fiscal policy and economic growth for 118 developing and 22 high-income OECD countries during the 1972–2005 period. They found that a period of economic growth is more likely to coincide with times when new fiscal policy initiatives have been implemented. In a similar European Commission (2013) study, it was reported that fiscal devaluation has only a limited and short-lived expansionary effect on employment and GDP, with fiscal devaluation having a regressive effect on workers regardless of the type of changes that are made to the VAT rate. In addition, the Commission found that tax swap measures cannot

be used as a substitute for the structural reforms that are needed to address the causes of external imbalances and poor growth. The repeated use of such initiatives, in particular consumption taxes, will eventually grind down the credibility of the government and minimize the effectiveness of the reform. [Baldacci et al. \(2009\)](#) analyzed the effects of fiscal policy responses in 118 episodes of banking crisis in advanced and emerging market countries. Their study showed that by implementing timely countercyclical fiscal measures, governments' are able to shorten the length of crisis episodes by stimulating aggregate demand. Moreover, fiscal expansions that support government consumption are more effective at decreasing the duration of financial crisis than public investment or income tax cut-based measures. Finally, from a Japanese perspective, [Kuttner and Posen \(2002\)](#) investigated the effectiveness of fiscal policy initiatives over the 1976–1999 period by analyzing real GDP, tax revenues, and public expenditures. Their study showed that expansionary fiscal policy, by way of tax cuts or increased public expenditure, failed to provide any substantial stimulus to the Japanese economy, with the results implying that a tax cut multiplier is 25% higher for a four-year horizon than that of public spending. Furthermore, an analysis of the historical data found that Japanese fiscal policy was contractionary in the 1990s, leading to a significant variation in growth. Most increases in public debt were associated with declining tax revenues from the recession.

4.1.3. Effect of Financial Consolidation

When introducing fiscal policy options, a key challenge is how to manage the trade-off between tackling income inequality and economic growth. The relationship can be non-linear and follow a U-shaped Kuznets curve. Governments can address these concerns by introducing fiscal consolidation policy that creates contraction strategies that minimize deficits and prevent the accumulation of more public debt. In this regard, [Larch \(2012\)](#) examined the so-called deficit bias in which economies run long-term deficits. The running of deficits across the cycle is commonly attributed to the "common pool" problem, which sees developed and middle-income countries externalize the societal costs in a manner that leaves them in debt. From the subsequent analysis of 30 middle-income and industrial countries over the 1960–2008 period, Larch concluded that while income inequality makes fiscal discipline more difficult, the link between income distribution and fiscal performance is not a direct one.

In other studies, [Agnello and Sousa \(2012\)](#) assessed the impact of fiscal consolidation on income inequality using an analysis of high-income industrialized countries. From their study, they found that the period of fiscal consolidation coincides with significant rises in income inequality. Moreover, while spending cuts were seen to have a detrimental effect on income distribution, tax hikes were found to have an equalizing effect; while [Cottarelli and Jaramillo \(2013\)](#) provided an additional area of enquiry by examining the debate between debt consolidation and growth. Their study concluded that a stabilization in the public debt-to-GDP ratio has a constraining effect on economic growth, which in the long term makes it harder to sustain public debt levels and can as a consequence lead to greater income inequality. More recently, [Heimberger \(2018\)](#) found that fiscal consolidations typically lead to an increase in income inequality. In addition to this, the results showed that the impact of fiscal austerity measures on the income distribution are more pronounced when: (i) the size of the fiscal consolidation package is larger; (ii) the duration of the adjustment is long; and (ii) the fiscal consolidation relates to spending cuts rather than policies that increase taxes.

4.1.4. Summary of Fiscal Policy

From our analysis of the literature, it is clear that the tax and expenditure policies being implemented by countries need to be carefully designed, in order to balance distributional and efficiency objectives. In an attempt to explain how this should be done, the [International Monetary Fund \(IMF\)](#) provided a detailed set of policy provisions. In this instance, an appropriate mix of instruments will depend on administrative capacity, as well as on society's preferences for redistribution, the role envisaged for the state, and political economy considerations.

In order to improve inequality, scholars such as [Greenwald and Stiglitz \(2010\)](#); [Ostry et al. \(2014\)](#); and [Stiglitz \(2015, 2016\)](#) have suggested that the rules regarding taxation policy should be rewritten in a way that reduces exclusion and promotes equality, growth, and employment. In order to do so, [Stiglitz \(2016\)](#) asserted that tax initiatives that focus on rents (both those associated with land and natural resources) would not only lead to greater levels of investment in more productive assets, but also provide significant additional sources of revenue. Changes in this regard would also help to address the marked disparity that has opened up between the growth in labor productivity and real wages. Moreover, removing the preferential treatment that is given to capital gains, especially on land and property, could potentially reduce other economic distortions, thereby reducing inequality ([Stiglitz 2015](#)). Such changes would need to be at a level that any increase in taxes on capital would be at least comparable to those placed on labor, and to higher levels for short-term capital gains. The introduction of such steps would lead to lower equilibrium wealth and income inequality ([Stiglitz 2016](#)). Reducing inequality through the introduction of these new measures would improve economic performance, not just in the short term, but also in the long. In addition, these fiscal policy measures also play an important role in promoting the three anchors of inclusive growth, namely expanding opportunities, broadening access to opportunities, and developing a social protection mechanism that acts as a safety net and springboard for development ([Ali 2007](#)).

From a developed country perspective, governments can implement a range of policy measures to tackle inequality, and these include: (i) the use of means testing (ii) raising retirement ages in pension systems, while also taking into consideration appropriate provisions for the poor whose life expectancy could be shorter; (iii) providing better access to higher education and healthcare services; (iv) implementing progressive personal income tax rate structures; and (v) reducing regressive tax exemptions. In addition to this, innovative approaches, such as the greater use of taxes on property and energy (such as carbon taxes) could also be considered for both advanced and developing economies ([International Monetary Fund IMF](#)). The impact that such measures can have on income inequality and GDP growth are mixed, as [Heshmati et al. \(2015\)](#) showed in their summary of the effects of different fiscal policy measures (see [Table 1](#)).

Table 1. Summary of fiscal policy effects of advanced economies.

	Policy Effects	Income Inequality	GDP Growth
1.	Increasing total tax revenues	Positive (in general)	Negative
2.	Changing the tax mix while keeping total tax revenues constant		
-	Moving from personal income tax to consumption taxes:	Negative	Positive
-	Moving from labor income to property and capital taxes:	Ambiguous	Positive
-	Real estate taxes	Negative	Positive
3.	Cutting tax expenditures and marginal tax rates:	Positive in most cases, but in work, tax credit is negative	Positive
4.	Increasing the progressivity of taxes (but revenue-neutral)		
-	Personal income tax: in-work tax credits narrow the income distribution and raise incentives to work	Positive	Ambiguous
-	Increase in top rates	Positive	Negative
-	The above measure combined with expanded earned income tax credit schemes or tax-free allowances	Positive	Positive

Source: [Heshmati et al. \(2015\)](#) "Table 2: Summary of Fiscal Policy Effects of the Organisation for Economic Co-operation and Development Member".

Among fiscal policy options, [Bastagli et al. \(2012\)](#) showed that direct income taxes and transfers had a 15% decrease on the Gini index for 25 OECD member countries during the 1985–2005 period. However, the level of reduction experienced varied across the countries studied. A similar argument was addressed by [Journard et al. \(2012\)](#) in which they showed that taxes and transfers have reduced the disposable income gap in OECD members, while the redistributive effect of each policy varies across member countries, with differences in magnitude and direction of policy instruments influencing these results. As for the tax incidence, income tax has been mostly redistributive compared to that of

other means-tested transfers (Bastagli et al. 2012). Personal income tax was especially progressive, although there were significant variations across countries (Organization for Economic Cooperation and Development OECD; Joumard et al. 2012). From our examination of the literature, we also found that in the short run, front-loaded fiscal adjustments are likely to hurt growth prospects, which would delay improvements in several fiscal indicators, including deficits, debt, and financing costs. While a number of studies addressed found the relationship between income distribution and fiscal performance to be indirect, there is also a strong argument to suggest that income inequality rises during periods of fiscal consolidation. Moreover, when consolidation plans have been implemented, particularly in the period directly following a banking crisis, the income gap effect is amplified, affecting households at the bottom of the income distribution the hardest. In addition to this, countries need to be mindful of the composition of fiscal consolidation (spending vs. tax-based) and its impact on consolidation. There is a broad consensus in the literature that tax-based consolidations are typically more contractionary than spending-based consolidations, particularly over the medium term. In particular, Guajardo et al. (2011) found that in the case of tax-based programs, the effect of a fiscal consolidation of one percent of GDP on output is -1.3 percent after two years, while in the case of spending-based programs, it is -0.3 percent after two years and not statistically significant.

4.2. Policy Reforms

In addition to the fiscal policy initiatives governments implement, other forms of reform are implemented as a means of achieving greater income equality. This section of the study discusses a range of policy platforms by checking whether education and marketplace reform can promote a redistributive effect.

4.2.1. Education

In most developed economies around the world, income inequality increases with average incomes because economic growth increasingly represents the use of capital and skills, rather than labor. As a consequence of this, the returns to capital (profits and rents) and skills (for the professionals, managers, executives, and technicians employment group) are increased at a faster rate to that of the returns to labor (wages) (Lim and Fong 2018). Tertiary education qualifications are a key river of this difference as they play a key role in contributing to a widening of the skill premium (excess of skilled over unskilled labor income).

Given such a climate, education and inequality can become mutually reinforcing, whereby families with higher discretionary incomes invest heavily in private tuition and extra-curricular activities for their children. This in turn enhances a child's ability to get into the best schools and universities, laying the foundation for getting higher paid jobs later in life. Employers are also an important factor within this discussion, with many companies known to screen the school and educational certification backgrounds of prospective job candidates. Such actions serve as a proxy for finding the right kind of behavioral characteristics and social networks that companies believe will enhance these employees' contribution to their company (Lim and Fong 2018). In addition, as the higher education sector has expanded, so too has the college wage premium (CWP) in which the gap between graduate and non-graduate incomes has also grown. Although, in recent times, this gap has fallen, a fact highlighted in a major study conducted by Ashworth and Ransom (2019). The results from this study show a general flattening in the CWP for birth cohorts from 1970 onwards in each of the five surveys used and even a decline for birth cohorts for the 1980–1984 period using the National Longitudinal Surveys of Youth (NLSY79 and NLSY97). Despite such changes, policy-makers in developed countries have focused on reforms in education to reduce inequality.

In some developed countries, particularly the U.S., unequal resource allocation between so-called "rich" and "poor" schooling areas is a major factor contributing to unequal educational, employment, and income outcomes. From a policy perspective, it is important that the funding model adopted by governments appropriately deal with this issue. At a tertiary education level, many countries,

including the U.S., have introduced funding schemes to support lower socio-economic groups and reduce apparent inequalities. The Federal Pell Grant schemes are a good example of such a funding initiative, whereby funds are awarded solely based on an individual's financial need (academic grades and extra-curricular activities are not a factor).² In New Zealand, the decile ranking of schools was one such example, with lower decile schools receiving additional support over others. However, the introduction of such a system has had unintended consequences, which have led to growing inequalities in other areas. For example, decile rankings have influenced property values, particularly in Auckland, where houses in well-known decile ten school zones have increased in value by up to 90% due to them being in the highly sought after "grammar zone" ([New Zealand Herald 2017](#)).

Governments from developed economies have also introduced a range of other education policy initiatives that are aimed at improving both the quality of education services, but also reducing the social inequalities that the sector can produce. These include, among others: (i) reductions in class sizes, (ii) additional financial and learning support for teachers and students in lower socio-economic areas, (iii) provisions for free nursery schooling, (iv) a renewed emphasis on vocational education, (v) better access to tertiary education loan and grant schemes for lower-income families, and (vi) the offering of provisional spaces for ethnic minorities within certain degree level programs. Such programs are funded through increases in fiscal spending in the education sector through a range of tax policy initiatives, which are detailed above in Table 1 (see [Heshmati et al. 2015](#)).

Finally, in advanced economies, the difficulties of dealing with high debt levels and mismatched skill sets among youth groups called for a need to integrate professional and academic education systems in a way that fosters a higher level of vocational skills ([World Economic Forum WEF](#)). Our study shows that a fair and sustainable tax and redistribution system can provide a range of significant benefits including more inclusive economic growth, enhanced social protection and reductions in the number of people living in poverty.

4.2.2. Trade Liberalization

From our analysis, the issue of globalization was also identified as an important driver of income inequality. While some studies highlight its benefits, protests from Seattle to Genoa have called out its unfairness and damage. This is because while many in the developing world have been lifted out of poverty by globalization, many in the developed world, for example in declining industries, have seen their jobs sent abroad to emerging markets. In this instance, globalization has been blamed for unfair competition, job losses, inequalities, environmental damage, security concerns, and many other ills ([Antic and Graham 2014](#)). From an economic perspective, the opening up of borders through liberalized international trade policies has arguably exacerbated inequalities in many countries, with the middle class hit particularly hard. In the U.S., median wages have been stagnant since the 1970s, with the hourly inflation-adjusted wages received by the typical worker barely rising, growing at only 0.2% per year ([Shambaugh and Nunn 2017](#)). The same picture is true for many other advanced economies, with middle income levels standing still, while those at the top have continued to do very well.

Assigning relative responsibility to the economic and international trade policies that are at the heart of this rising inequality, international trade and technological progress particularly in the manufacturing sector have played an important part, placing downward pressure on the wages of low-skilled workers. In the case of the U.S., as imports from developing low-wage economies made inroads into the manufacturing sector, many middle-class household fell victim to substantial job losses. In addition to this, new technologies meant that many manufacturing firms were able to produce more

² The maximum Pell Grant award for the 2018/2019 academic year was \$6095 USD. In order to be eligible, applicants have to be an undergraduate student who is enrolled full-time or part-time. Part-time students might not receive as much funding as full-time students, but your school cannot refuse your Pell Grant funds because you are enrolled less than half-time ([Salliemae 2019](#)).

while employing fewer workers. These developments led to an influx of not only new products and lower prices, but also the dislocation of the U.S. middle class and downward pressure on less-skilled workers' wages (Shambaugh and Nunn 2017).

However, a retreat away from globalization would be a mistake. By closing markets and implementing protectionist measures at a country's border, the world risks slowing the pace of growth and development as countries and regions retrench into their corners. Much has been made of the rhetoric and policy measures being put forward by the Trump administration. As a long-time advocate for open liberalized trade policy, the U.S. has in recent times sought to implement measures that firmly put America first. A key part of this has been a very public and very critical portrayal of China's trade and monetary policies. While steps towards a trade war have abated, it is imperative that more is done to bring countries together through progressive and inclusive forms of trade policy. Such measures would allow the transfers of finance, knowledge, and trade to occur in a manner that would help to make countries more prosperous and, as such, lift developing countries more quickly to affluence.

While globalization has created wage- and job-related concerns for many developed countries, it is still an important pathway for driving economic growth and reducing inequalities in the world. In order to overcome areas of concern, there is a wide spectrum of policy and institutional levers that can foster both growth and social inclusion at the same time. Such policy provisions include investments in education and a progressive tax policy that effectively redistributes wealth, which is a key issue when trying to assist those that have lost their jobs through factors associated with globalization. Other factors that can enhance living standards and reduce income inequalities are investments in basic services such as healthcare to public transport, through to support for entrepreneurship, finance, as well as efforts to reduce corruption.

4.2.3. Labor Market Reform

Labor market reforms have been a key part of the inequality debate. As our assessment of the literature showed, labor market reform can have varying effects on inequality. From an institutional perspective, labor market institutions, such as unions, not only reduced inequality, but also helped to provide a mechanism to increase employment and economic growth opportunities (Garcia-Peñalosa 2010). Hendel et al. (2005) showed that while a higher minimum wage can help to reduce inequality, it can also lead to high unemployment; a key determinant of income inequality. In addition to this, fiscal policies are also used in the labor market, to redistribute income; however, the hand of the government can only do so much to moderate inequality.

As was mentioned earlier, minimum wage reform is a key aspect of labor market policy reform, with most high-income countries offering a minimum wage, the major exceptions being places such as Sweden, Denmark, Iceland, Norway, and Switzerland. For developed economies like Australia, who have had a minimum wage policy since 2005, the last few years have seen the erosion of the minimum wage levels relative to overall wage levels and productivity. In addition to this, the union movement has had a declining influence in the country. This has led to the rapid decline of collective bargaining due to legal restrictions, employer hostility, and falling union membership, with only 13% of private sector workers covered by a current collective agreement (Stanford 2018). As has been the case in Australia and in many other developed economies (i.e., New Zealand, the U.S., and the U.K.), there has been a gradual erosion in the institutions that were designed to lift wages and make them more equal.

In order to overcome these labor market conditions, governments need to produce an ambitious, multidimensional effort to rebuild the policy layers of inclusive growth. Minimum wages should therefore be high enough to ensure that those working full-time are able to escape the poverty trap. As part of this, there have been moves to support a living wage, which is higher than the legal minimum wage thresholds. The New Zealand government has been quick to support these calls with all cleaning and catering staff to be paid a living wage by the end of 2019 (Radio New Zealand RNZ). In addition to this, governments should implement supplementary measures that strengthen worker pay protections for overtime and holiday pay, etc. (Radio New Zealand RNZ). There should also be income tax

reductions for those working a second or third job. Given the restrictions that have been put in place to limit collective bargaining, particularly in places like the U.S. (Fahlbeck 1994) and Australia (Stanford 2018) in recent times, there may be a need to reevaluate these policy initiatives in a manner that allows workers to negotiate multi-firm or industry-wide agreements. Changes in these areas would lead to increases in wage levels and potentially a reduction in income inequality levels.

5. Conclusions

In recent decades, most developed economies have sought to achieve strong economic growth through the implementation of a range of policy reforms, the consequences of which have led to growing inequality and a general lack of inclusive growth. As countries seek answers, many scholars have sought to better understand what drives inequality and growth and the policies that can be implemented to achieve better outcomes for society.

This study marks another step forward in this analysis by providing a detailed and extensive survey of the literature associated with inclusive growth and the fiscal policy initiatives that have been utilized to tackle the issues on inequality. It also provides a point of discussion for other forms of policy initiative that could be used to tackle the causes of inequality. As suggested by an anonymous referee, this paper deals with an important concern utilizing an integrative literature review approach. This approach is most useful as an intermediate input (step) in the production of a final product. The approach helps to identify the causes of income inequality. Instead of relying on qualitative inferences alone, one is able to estimate the quantitative effects of the identified causes on income inequality at one stage and the effects of income inequality on inclusive growth at another stage. This would add additional confidence regarding the robust nature of the results if qualitative and quantitative inferences suggest the same or approximately the same thing.

The results from the literature review show that the key drivers of inequality are skill-biased technological change, education, globalization and international trade policies, and reform of the labor market. In order to address these areas of concern, we identified relevant policy initiatives that can be implemented by governments throughout the developed world. While there is no silver bullet, much can be achieved through the development of a coordinated policy platform that looks to deal directly with the root causes of inequality, which may in turn lead to wage increases for the much maligned middle classes and sustained economic growth over the long term. Achieving such aims will do much to resolve the inequities of the labor market and society as a whole. Given the progress made in better understanding the issues relating to equal growth and income inequality, another possible direction of future research is wealth inequality, concentration on and discussion of the differences between wealth and income inequality, and why dealing with the latter requires different policy instruments.

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