

RESEARCH PAPER



Targeted social safeguards in the age of universal social protection: the IMF and health systems of low-income countries

Thomas Stubbs^{a,b}  and Alexander Kentikelenis^{c,d} 

^aCentre for Business Research, University of Cambridge, Cambridge, UK; ^bSchool of Social Sciences, University of Waikato, Hamilton, New Zealand; ^cDepartment of Sociology, University of Oxford, Oxford, UK; ^dDepartment of Sociology, University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

In offering loans to low-income countries in exchange for policy reforms, the International Monetary Fund (IMF) typically sets the fiscal parameters within which health systems develop. In a recent report released by the organisation, the IMF claims that their programmes have promoted social protection, including access to health care. We revisit the findings presented in the IMF's assessment. Drawing on material collected from the IMF and empirical analyses, we show that the report is methodologically flawed, unduly optimistic and potentially misleading. We conclude by reflecting on the IMF's steadfast endorsement of targeted social assistance, despite a global tide turn towards universal social provision.

ARTICLE HISTORY

Received 14 April 2017
Accepted 23 May 2017

KEYWORDS

International Monetary Fund; low-income countries; social protection; health expenditures

Introduction

The impact of free markets on population health in the developing world has been the topic of sustained attention in global policy debates (Labonté, Schrecker, Packer, & Runnels, 2009; Labonté & Torgerson, 2005). Most recently, the United Nations' Sustainable Development Goals (SDGs) set out a bold and ambitious programme to improve the human condition. This includes checks on the unlimited expansion of markets and protections for populations from the consequences of neoliberalism – the policy paradigm premised on reducing the role of states and deregulating economies (Labonté & Stuckler, 2015; Schrecker, 2016; Schrecker & Bamba, 2015). For instance, Goals 1.3 and 3.8 seek to ensure social protection for all and universal health coverage, respectively (UNGA, 2015). Low-income countries (LICs) – which the IMF (2015a) classifies as those with gross national income per capita of less than US\$1,215 (although this criterion varies for those with fewer than 1.5 million inhabitants) – are often overcoming legacies of conflict, limited bureaucratic capacity and insufficient financing for social policies. These countries now have a template to draw on, as they prepare to achieve the SDGs.

The attainment of SDGs is also premised on LICs receiving support from a range of global-level actors. Most notably, the aid programmes of high-income countries are often directed to improving health in the developing world, and international non-governmental organisations finance health interventions targeting infectious diseases or vulnerable populations. At the same time, intergovernmental organisations – like the World Health Organization – also have a key role in shaping the parameters within which developing-country health systems can develop.

Yet, analyses of global actors affecting progress towards improving social protection and population health occasionally understate the role of international financial institutions, like the World Bank or the regional development banks. These powerful intergovernmental organisations offer loans in exchange for policy reforms, known as ‘conditionalities’ (Babb & Kentikelenis, 2017). Among these institutions, the International Monetary Fund (IMF) stands out as a key agent shaping countries’ reform trajectories, and – by extension – policy space for health (Kentikelenis, King, McKee, & Stuckler, 2015; Ruckert & Labonté, 2013). Between 1995 and 2014, LICs have had to implement IMF programmes for 10.3 years on average (Stubbs, Kentikelenis, Stuckler, McKee, & King, 2017b), or one in every two years, and the impact of these reforms has been linked to negative social and health consequences (Babb, 2005; Daoud et al., 2017; Kentikelenis, 2017).

For this reason, it is encouraging that the IMF recently published an assessment of how its programmes affect social protection in LICs, including health policy (IMF, 2017). The IMF finds that their programmes have promoted social protection systems and measures. Their evaluation is supported by an analysis of staff reports, which reveals that fiscal consolidation – that is, reductions to the fiscal deficit via government expenditure cuts and revenue generation – occurred in only half of all LIC programmes since 2010, and that nearly all of these included conditions stipulating social and priority expenditure floors. Findings are further bolstered by regression analyses showing that IMF programmes have, on average, increased education spending and have no effect on health spending in LICs for the past two decades.

If these findings are accurate, they demonstrate great potential for the IMF to support the development of effective and efficient health systems in LICs. We revisit the evidence presented in the IMF study and replicate its empirical analyses. Our findings suggest that the IMF report is methodologically flawed, unduly optimistic and potentially misleading.

The effects of IMF programmes on health and education spending

Revisiting the IMF’s findings on how health and education spending fares in countries under their programmes, we scrutinised their regression analysis. The IMF assessment covers 48 LICs between 1988 and 2014 for education spending, and 59 between 1995 and 2014 for health. Controlling for known confounders, the study finds that IMF programme participation is associated with increases in education spending, but has no statistically significant effect on health spending. This analysis appropriately deploys a two-stage Heckman selection model to control for selection bias, which treats non-random assignment of countries into IMF participating and non-participating groups as an omitted variable problem (Heckman, 1979). A probit regression initially predicts a country’s IMF participation, thereby generating the ‘inverse-Mills ratio’. This ratio is subsequently added to the vector of controls in an outcome equation estimated with Ordinary Least Squares (OLS) regression.

Nonetheless, the methodological strategy employed in the IMF analysis is unsound for three reasons. First, it fails to include a plausible ‘exclusion restriction’ – a variable that influences selection into IMF programmes but not the subsequent outcome of interest except via IMF participation. Without such a variable, the model’s estimates become imprecise due to collinearity of the inverse-Mills ratio (Lang, 2016; Wooldridge, 2010). To be sure, their model does include variables that are not in the outcome equation – international reserves, bilateral exchange rate and an exchange rate classification index – but these can affect social spending outside the IMF channel. Exchange rates are not excludable because currency depreciation raises the costs of imported drugs and hospital equipment, which can increase government social spending (Kentikelenis, Stubbs, & King, 2015); likewise, governments with greater accumulations of international reserves can draw down on them to safeguard social expenditures during economic downturns (Thomson, 2015).

Second, to account for serial correlation, the report’s outcome equation includes a lagged-dependent variable (Clements, Gupta, & Nozaki, 2013). Such a correction can have a severe downward bias, and occasionally the substantive variables can even take on the wrong sign (Achen, 2001; Stuckler, King, & McKee, 2012). Furthermore, in the presence of country fixed effects, OLS regression with a

lagged-dependent variable can introduce Nickell bias (Nickell, 1981), producing unreliable coefficient estimates.

Third, the IMF includes both PRGT and PSI-supported programmes in its analysis, and not GRA-supported programmes. Box 1 provides a description of these types of IMF programmes. We argue that PSIs should be excluded because there is no credit attached to them (IMF, 2015d); therefore, conditionalities attached to these programmes are not coercive as they do not undermine access to credit. Conversely, GRA-supported programmes should be included in the analysis because they are also applied – although less frequently – to low-income countries, and deploy conditionality to safeguard access to credit.

To address these limitations of the IMF's analysis, we reanalysed how health and education spending is affected in LICs with IMF programmes. We rely on the same sample of years and use the same controls in the outcome equation, *sans* the lagged-dependent variable. We do not include international reserves or exchange rates in the outcome equation in order to mirror the IMF's analysis as closely as possible, and because missing data on these variables unduly reduce the number of observations in the analysis. In any case, the effect of these variables on government health and education spending is captured by the government balance measure already included in the outcome equation. Following established procedures (Crivelli & Gupta, 2015; Nelson & Wallace, 2016; Oberdabernig, 2013; Stubbs, Kentikelenis, & King, 2016), we only code as IMF participation those years where a country was under a programme with credit attached to it. Our IMF participation equation incorporates two exclusion restrictions: the total number of countries under IMF programmes, as participation is affected by the extent to which the Fund has resources available (Vreeland, 2003); and United Nations General Assembly voting similarity with the United States, as the IMF prefers lending to political allies of major powers (Barro & Lee, 2005; Thacker, 1999). Both variables thus influence selection into IMF programmes, but do not influence government education or health spending (except via an effect on IMF participation).

Box 1. Types of IMF arrangements.

The IMF has several types of arrangements, or 'facilities' available to countries. These vary according to access to credit, duration, interest rates charged, conditionality, frequency of reviews and eligibility criteria. For most – but not all – arrangements, the funds approved are phased over the duration of the programme in tranches, which are disbursed pending a satisfactory review by IMF staff on the implementation of *ex post* conditionality.

Poverty Reduction and Growth Trust (PRGT) Supported Programmes

Low-income countries are eligible for loans that carry low interest rates and extended repayment periods under the PRGT framework. Beginning in 1986, concessional financing was provided under the Structural Adjustment Facility (SAF) and the Enhanced Structural Adjustment Facility (ESAF), both 3–4 year conditionality-based programmes reviewed annually and semi-annually, respectively, and were replaced in 1999 by the Poverty Reduction and Growth Facility (PRGF), another 3–4 year conditionality-based programme reviewed on a semi-annual basis. A new concessional funding architecture became effective on 7 January 2010, which includes three new facilities: (i) the ECF, which are 3–4 year programmes to provide medium-term support and replace the PRGF; (ii) the SCF, which are 1–2 year conditionality-based programmes reviewed every 4–6 months that provide short-term and precautionary needs; and the Rapid Credit Facility (RCF), a one-off payment for countries facing urgent balance of payments needs without *ex post* programme-based conditionality or reviews (IMF, 2015b, 2015c).

Policy Support Instrument (PSI) Supported Programmes

The PSI is a 1–5 year programme that offers low-income countries Fund advice but no access to credit, and is reviewed by the Fund on a semi-annual basis (IMF, 2015d).

General Resources Account (GRA) Supported Programmes

Countries can borrow through non-concessional lending facilities under the GRA framework, which charge higher interest rates and have more compressed repayment periods. Most loans under this category take the form of a Stand-By Arrangement (SBA) or Extended Fund Facility (EFF). SBAs are conditionality-based programmes designed to deal with short-term balance of payments problems, run for 1–2 years and are reviewed quarterly. EFFs are conditionality-based programmes designed to deal with long-term imbalances due to structural problems, and typically run for 3–4 years.

In Table 1, we present the results of our quantitative analysis on government education and health expenditure as a share of GDP. Our findings clearly diverge from those of the IMF's report. In particular, IMF programme participation has no statistically significant effect on education spending, but is

Table 1. The IMF and government health and education spending in low-income countries.

Dependent variable	Education spending (% of GDP)	Education spending (% of GDP)	Health spending (% of GDP)	Health spending (% of GDP)
Sample period	1988–2014	1988–2014	1995–2014	1995–2014
	1	2	3	4
<i>Main</i>				
Log GDP per capita (lagged)	1.3830*** [0.4233]	1.1077** [0.4456]	0.1313 [0.1843]	−0.3645 [0.2525]
Urbanisation level	0.0540** [0.0254]	0.0697*** [0.0249]	0.0594*** [0.0111]	0.0568*** [0.0118]
Population under 15	−0.0179 [0.0120]	−0.0101 [0.0121]		
Population over 65			−0.2725*** [0.0717]	−0.2328*** [0.0741]
Government balance (lagged)	−0.0305*** [0.0111]	−0.0228* [0.0123]	−0.0064 [0.0060]	0.008 [0.0095]
Trade openness (lagged)	0.0087** [0.0035]	0.0091*** [0.0034]	0.001 [0.0017]	0.0004 [0.0019]
IMF programme (lagged)		−0.9091 [0.6230]		−1.6991*** [0.5573]
Inverse-Mills ratio		0.7593** [0.3623]		1.1766*** [0.3375]
Constant	−4.2713 [3.0844]	−3.1244 [3.1314]	0.7274 [1.0489]	4.5586*** [1.6183]
Country fixed effects	Yes	Yes	Yes	Yes
R-squared	0.830	0.835	0.716	0.727
Number of observations	484	484	904	904
<i>Selection</i>				
Countries under IMF programme (lagged)		0.0142* [0.0080]		0.0202*** [0.0055]
UNGA voting similarity with US (lagged)		2.2101*** [0.7862]		0.429 [0.4770]
Log GDP per capita (lagged)		−0.8104*** [0.1706]		−0.6736*** [0.0998]
Urbanisation level		0.0305*** [0.0056]		0.0244*** [0.0037]
Population under 15		0.0107** [0.0045]		
Population over 65				0.0355 [0.0304]
Government balance (lagged)		0.0389*** [0.0142]		0.0332*** [0.0096]
Trade openness (lagged)		−0.0009 [0.0019]		−0.0007 [0.0012]
Constant		2.4887** [1.1613]		2.2430*** [0.6307]
Number of observations	484	484	904	904

Sources: Log GDP per capita, Urbanisation level, Population under 15, Population over 65, and Trade openness (World Bank, 2016); IMF programme, and Countries under IMF programme (Kentikelenis et al., 2016); Government balance (IMF, 2016); UNGA voting similarity with US (Voeten, Strezhnev, & Bailey, 2016).

Notes: Standard errors are shown in brackets.

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

associated with decreases in health spending. Controlling for known confounders, an additional year of IMF programme participation decreases health spending, on average, by 1.7 percentage points as a share of GDP. Overall, the regression analysis shows that – contrary to the IMF’s claim – their fiscal adjustment policies come at the expense of social spending.

Austerity and fiscal space for health

The IMF has long been associated with austerity measures, delivering painful health expenditure cuts that adversely affect already vulnerable populations (Kentikelenis, 2017; Kentikelenis, Karanikolos, Reeves, McKee, & Stuckler, 2014; Labonté & Stuckler, 2015; Ooms & Schrecker, 2005; Ruckert & Labonté, 2013; Schrecker, 2016; Stuckler & Basu, 2013; Stuckler et al., 2010). It may thus come as a surprise that, according to the IMF’s (2017, p. 8) analysis, between January 2010 and May 2016 ‘50% of LIC programs involved fiscal consolidation, 43% involved fiscal expansion, and 7% were fiscally neutral’. The quoted half involving fiscal consolidation is by no means an insubstantial amount, but our closer scrutiny suggests that even these claims are misleading.

First, the analysis includes facilities that either lack programme-based conditionality – the Rapid Credit Fund (RCF) – or do not have funds attached – the Policy Support Instrument (PSI). For RCFs, emergency financial assistance is provided as an outright disbursement to low-income countries facing urgent balance of payments needs (IMF, 2015c). Given the facility is deployed in emergencies, and that it lacks programme-based conditionalities or reviews (and thus no ongoing coercive mechanism), it is unsurprising that many of these are expansionary. For PSIs, we already note that they should be excluded because there is no credit attached to them (IMF, 2015d). If one excludes these facilities, then of the 48 programmes commencing since 2010, 58% are fiscally contractionary, 35% expansionary and 7% fiscally neutral.

But this is still an incomplete picture, as – second – the analysis only examines the initial year of programmes. Over half are Extended Credit Facility (ECF) programmes, which run for three to four years; Standby Credit Facility (SCF) programmes can also last for two years. The analysis is thus misleading as a measure of fiscal adjustment because targets typically become more stringent as the programme progresses. What may have been fiscally expansionary or neutral in the initial year of the programme can become contractionary in subsequent years. Illustrative of this pattern is Kenya’s three-year programme commencing 2011, which adopted a process of ‘gradual fiscal adjustment over a three-year horizon’ (IMF, 2011a, p. 2) that initially sought to ‘keep the fiscal deficit at around 7.4% of GDP for a second consecutive year’ (IMF, 2011a, p. 36), but targeted a reduction to 4.8% by 2014/2015 (IMF, 2012a, p. 18). Similarly, for the Kyrgyz Republic’s three-year programme commencing 2011, IMF staff supported ‘limited fiscal expansion with a deficit of 7.6% of GDP ... to support the nascent economic recovery’ (IMF, 2011b, p. 19), but encouraged gradual fiscal consolidation to a 3.8% deficit between 2012 and 2014 (IMF, 2012b, p. 8).

The track record of priority social spending conditions

A third key component of the new, ‘human’ face of the IMF’s lending programmes is the inclusion of priority spending conditions. These are quantitative targets that stipulate the maintenance or increase of public expenditure in policy areas – primarily health and education – that can be hard-hit by economic crises and austerity measures. This is not an innovation, as such stipulations were first introduced to IMF programmes in the late-1990s. The organisation now reports that they are incorporated into 60 out of the 68 PRGT and PSI-supported programmes approved since 2010, or 88.2%.

We collected data on the implementation of priority spending floors applicable to IMF programmes in Sub-Saharan African countries – where most such conditions applied – since 2000. Of the 362 conditions for which we could trace implementation data, only 184 were implemented, about 50.8% (Kentikelenis, Stubbs, & King, 2016). And in years where priority spending floors are rarely met, budget balance conditions are met almost all the time (Kentikelenis et al., 2016). These findings suggest that the IMF

assigns less importance to priority spending floors than to budget balance ceilings. Indeed, the latter typically appear as binding conditions – they directly determine scheduled disbursements of loans – whereas priority spending floors are non-binding conditions that serve as markers for broader progress assessment and do not automatically suspend the loan (IMF, 2001).

Further, recent research has analysed IMF archival documents on West Africa – the region that recorded the poorest implementation of priority spending floors, at 46.2% – for information related to health systems and social protection policies, and reports that macroeconomic targets set by the IMF crowd out health concerns (Stubbs, Kentikelenis, Stuckler, McKee, & King, 2017a; Stubbs et al., 2017b). For example, authorities in Benin – a country that met only 34.5% of its priority spending floors between 1995 and 2014 – cut poverty reduction spending in 2005 to ‘ensure achievement of the main fiscal objectives [of the IMF programme]’ (IMF, 2006, p. 37). Guinea and Sierra Leone also demonstrate a similar experience, as their governments recently reported an inability to meet priority spending targets due to public spending cuts mandated by the IMF (IMF, 2014a, 2014b).

Targeting in an age of universalism

The IMF explicitly endorses the development of targeted social assistance. For instance, in acknowledging the challenges of limited financial resources to fund social protection, they advocate ‘better target[ing of] the poor’ (IMF, 2017, p. 21), rather than appealing to options consistent with the SDG agenda, such as financing universal social protection systems through greater international partnership (i.e., Goal 17). Indeed, the targeting mantra is ostensible in the IMF’s choice to focus not on social protection more generally, but on ‘social safeguards’, defined as ‘measures aimed at safeguarding social spending and protecting the most vulnerable’ (IMF, 2017, p. 6). This position reflects the policy consensus of the 1990s (Deacon, 2005), but is far removed from current objectives of the international community vis-à-vis social protection.

The recently codified SDGs provide a vision of a ‘world with equitable and universal access to quality education at all levels, to health care and social protection’ (UNGA, 2015, p. 3). Remarkably, acknowledgement of these Goals is entirely absent from the IMF report, despite being adopted unanimously by the United Nations’ General Assembly. Instead, the IMF only appears to be in dialogue with itself: out of the 22 studies cited in the report, only one is not conducted by its staff (namely, a report by the IMF’s sister organisation, the World Bank). This observation reflects earlier criticisms directed at the Fund for publishing self-congratulatory reports on its own activities (Gabel, 2011), thereby developing important policies for LICs in limited interaction with relevant outside knowledge. Consequently, it is no surprise that the report’s recommendations ‘do not require changes to Fund policies’ (IMF, 2017, p. 2); a conclusion that is difficult to sustain on the basis of available evidence.

By making strong claims based on inadequate data and methodologies, the IMF misrepresents the impact of its programmes on social protection systems of LICs. Yet, meeting internationally agreed-upon standards for universal social protection will require the collaboration and coordination of a diverse range of global actors, including UN entities like the IMF. If these actors are to assist countries in improving population health, then having common objectives – and vernacular – is of paramount importance. The SDGs offer not only a template to structure these policy debates, but an opportunity for the IMF and other international organisations to fundamentally transform their policies and practices.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

Funding from the Cambridge Political Economy Society Trust (‘IMF conditionality and socioeconomic development’); and the Institute for New Economic Thinking (INET Grant INO13-00020: ‘The Political Economy of Structural Adjustment’) is gratefully acknowledged.

ORCID

Thomas Stubbs  <http://orcid.org/0000-0002-2624-9272>

Alexander Kentikelenis  <http://orcid.org/0000-0002-1543-4595>

References

- Achen, C. (2001). *Why lagged dependent variables can suppress the explanatory power of other independent variables* (Working Paper). Ann Arbor, MI.
- Babb, S. (2005). The social consequences of structural adjustment: Recent evidence and current debates. *Annual Review of Sociology*, 31, 199–222. doi:10.1146/annurev.soc.31.041304.122258
- Babb, S., & Kentikelenis, A. (2017). International financial institutions as agents of neoliberalism. In D. Cahill, M. Cooper, & M. Konings (Eds.), *The sage handbook of neoliberalism*. Thousand Oaks, CA: Sage.
- Barro, R., & Lee, J.-W. (2005). IMF programs: Who is chosen and what are the effects? *Journal of Monetary Economics*, 52, 1245–1269. doi:10.1016/j.jmoneco.2005.04.003
- Clements, B., Gupta, S., & Nozaki, M. (2013). What happens to social spending in IMF-supported programmes? *Applied Economics*, 45, 4022–4033. doi:10.1080/00036846.2012.744136
- Crivelli, E., & Gupta, S. (2015). Does conditionality in IMF-supported programs promote revenue reform? *International Tax and Public Finance*, 23, 550–579. doi:10.1007/s10797-015-9379-7
- Daoud, A., Nosrati, E., Reinsberg, B., Kentikelenis, A. E., Stubbs, T. H., & King, L. P. (2017). Impact of international monetary fund programs on child health. *Proceedings of the National Academy of Sciences*. doi:10.1073/pnas.1617353114
- Deacon, B. (2005). From “safety nets” back to ‘universal social provision’: Is the global tide turning? *Global Social Policy*, 5, 19–28. doi:10.1177/1468018105050118
- Gabel, I. (2011). Not your grandfather’s IMF: Global crisis, ‘productive incoherence’ and developmental policy space. *Cambridge Journal of Economics*, 35, 805–830. doi:10.1093/cje/ber012
- Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica*, 47, 153–161. doi:10.2307/1912352
- IMF. (2001). *Structural Conditionality in Fund-Supported Programs*. Washington DC. Retrieved from <http://www.imf.org/external/np/pdr/concd/2001/eng/struct/>
- IMF. (2006). *Benin: 2006 article IV consultation, first review under the three-year arrangement under the Poverty Reduction and Growth Facility, and request for waiver of nonobservance of performance criteria*. EBS/06/146. Washington, DC. Retrieved from http://adlib.imf.org/digital_assets/wwwopac.ashx?command=getcontent&server=webdocs&value=EB/2006/EBS/302434.PDF
- IMF. (2011a). *Kenya: Request for a three-year arrangement under the Extended Credit Facility*. Country Report No. 11/38. Washington, DC. Retrieved from <http://www.imf.org/external/pubs/cat/longres.aspx?sk=24636.0>
- IMF. (2011b). *Kyrgyz Republic: 2011 Article IV consultation and request for a three-year arrangement under the Extended Credit Facility*. Country Report No. 11/155. Washington, DC. Retrieved from <http://www.imf.org/external/pubs/cat/longres.aspx?sk=25002.0>
- IMF. (2012a). *Kenya: Third review under the three-year arrangement under the Extended Credit Facility and request for modification of performance criteria*. Country Report No. 12/97. Washington, DC. Retrieved from <http://www.imf.org/external/pubs/cat/longres.aspx?sk=25870.0>
- IMF. (2012b). *Kyrgyz Republic: Third review under the three-year arrangement under the Extended Credit Facility and request for modification of performance criteria*. Country Report No. 12/329. Washington, DC. Retrieved from <http://www.imf.org/external/pubs/cat/longres.aspx?sk=40161.0>
- IMF. (2014a). *Guinea: Letter of intent, memorandum of economic and financial policies, and technical memorandum of understanding*. Washington, DC. Retrieved from <http://www.imf.org/External/NP/LOI/2014/GIN/020114.pdf>
- IMF. (2014b). *Sierra Leone: First review under the extended credit facility arrangement, request for modification of performance criteria, and financing assurances review – staff report; and press release*. Washington, DC. Retrieved from <http://www.imf.org/external/pubs/ft/scr/2014/cr14171.pdf>
- IMF. (2015a). *Eligibility to use the fund’s facilities for concessional financing*. Washington, DC. Retrieved from <http://www.imf.org/external/np/pp/eng/2015/062415.pdf>
- IMF. (2015b). *Financing the IMF’s concessional lending to low-income countries*. Retrieved May 11, 2015, from <http://www.imf.org/external/np/exr/facts/concesslending.htm>
- IMF. (2015c). *IMF Rapid Credit Facility (RCF)*. Retrieved May 11, 2015, from <http://www.imf.org/external/np/exr/facts/rcf.htm>
- IMF. (2015d). *The Policy Support Instrument*. Retrieved May 11, 2015, from <http://www.imf.org/external/np/exr/facts/psi.htm>
- IMF. (2016). *World economic outlook data: April 2016 Edition*. Retrieved February 5, 2016, from <https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>
- IMF. (2017). *Social safeguards and program design in PRGT and PSI-supported programs*. Washington DC. Retrieved from <http://www.imf.org/en/Publications/Policy-Papers/Issues/2017/06/01/pp042117social-safeguards-and-program-design-in-prgt-and-psi>

- Kentikelenis, A. (2017). Structural adjustment and health: A conceptual framework and evidence on pathways. *Social Science & Medicine*. doi:10.1016/j.socscimed.2017.02.021
- Kentikelenis, A., Karanikolos, M., Reeves, A., McKee, M., & Stuckler, D. (2014). Greece's health crisis: From austerity to denialism. *The Lancet*, 383, 748–753. doi:10.1016/S0140-6736(13)62291-6
- Kentikelenis, A., King, L., McKee, M., & Stuckler, D. (2015). The International Monetary Fund and the ebola outbreak. *The Lancet Global Health*, 3, e69–e70. doi:10.1016/S2214-109X(14)70377-8
- Kentikelenis, A., Stubbs, T., & King, L. (2015). Structural adjustment and public spending on health: Evidence from IMF programs in low-income countries. *Social Science & Medicine*, 126, 169–176. doi:10.1016/j.socscimed.2014.12.027
- Kentikelenis, A., Stubbs, T., & King, L. (2016). IMF conditionality and development policy space, 1985–2014. *Review of International Political Economy*, 23, 543–582. doi:10.1080/09692290.2016.1174953
- Labonté, R., & Stuckler, D. (2015). The rise of neoliberalism: How bad economics imperils health and what to do about it. *Journal of Epidemiology and Community Health*, 70, 312–318. doi:10.1136/jech-2015-206295
- Labonté, R., & Torgerson, R. (2005). Interrogating globalization, health and development: Towards a comprehensive framework for research, policy and political action. *Critical Public Health*, 15, 157–179. doi:10.1080/09581590500186117
- Labonté, R., Schrecker, T., Packer, C., & Runnels, V. (Eds.). (2009). *Globalization and health: Pathways, evidence and policy*. London: Routledge.
- Lang, V. F. (2016). *The economics of the democratic deficit: The effect of IMF programs on inequality* (Discussion Paper No. 617). Heidelberg.
- Nelson, S., & Wallace, G. P. R. (2016). Are IMF lending programs good or bad for democracy? *Review of International Organizations*. doi:10.1007/s11558-016-9250-3
- Nickell, S. (1981). Biases in dynamic models with fixed effects. *Econometrica*, 49, 1417–1426. doi:10.2307/1911408
- Oberdabernig, D. (2013). Revisiting the effects of IMF programs on poverty and inequality. *World Development*, 46, 113–142. doi:10.1016/j.worlddev.2013.01.033
- Ooms, G., & Schrecker, T. (2005). Expenditure ceilings, multilateral financial institutions, and the health of poor populations. *The Lancet*, 365, 1821–1823. doi:10.1016/S0140-6736(05)66586-5
- Ruckert, A., & Labonté, R. (2013). The financial crisis and global health: The International Monetary Fund's (IMF) policy response. *Health Promotion International*, 28, 357–366. doi:10.1093/heapro/das016
- Schrecker, T. (2016). Neoliberalism and health: The linkages and the dangers. *Sociology Compass*, 10, 952–971. doi:10.1111/soc4.12408
- Schrecker, T., & Bamba, C. (2015). *How politics makes us sick: Neoliberal epidemics*. Basingstoke: Palgrave Macmillan.
- Stubbs, T., Kentikelenis, A., & King, L. (2016). Catalyzing aid? The IMF and donor behavior in aid allocation. *World Development*, 78, 511–528. doi:10.1016/j.worlddev.2015.10.010
- Stubbs, T., Kentikelenis, A., Stuckler, D., McKee, M., & King, L. (2017a). The IMF and government health expenditure: A response to Sanjeev Gupta. *Social Science & Medicine*, 181, 202–204. doi:10.1016/j.socscimed.2017.03.050
- Stubbs, T., Kentikelenis, A., Stuckler, D., McKee, M., & King, L. (2017b). The impact of IMF conditionality on government health expenditure: A cross-national analysis of 16 West African nations. *Social Science & Medicine*, 174, 220–227. doi:10.1016/j.socscimed.2016.12.016
- Stuckler, D., & Basu, S. (2013). *The body economic: Why austerity kills*. New York, NY: Basic Books.
- Stuckler, D., Basu, S., Gilmore, A., Batniji, R., Ooms, G., Marphatia, A., ... McKee, M. (2010). An evaluation of the international monetary fund's claims about public health. *International Journal of Health Services*, 40, 327–332. doi:10.2190/HS.40.2.m
- Stuckler, D., King, L., & McKee, M. (2012). The disappearing health effects of rapid privatisation: A case of statistical obscurantism? *Social Science & Medicine*, 75, 23–31. doi:10.1016/j.socscimed.2011.12.054
- Thacker, S. (1999). The high politics of IMF lending. *World Politics*, 52, 38–75. doi:10.1017/S0043887100020025
- Thomson, S. (2015). *Economic crisis, health systems and health in Europe: Impact and implications for policy*. Maidenhead: Open University Press.
- UNGA. (2015). *Resolution A/70/1: Transforming Our World: The 2030 Agenda for Sustainable Development*. New York, NY.
- Voeten, E., Strezhnev, A., & Bailey, M. (2016). United Nations general assembly voting data: April 2016. Retrieved June 6, 2016, from <http://hdl.handle.net/1902.1/12379>
- Vreeland, J. (2003). *The IMF and economic development*. Cambridge: Cambridge University Press.
- Wooldridge, J. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). Cambridge, MA: MIT Press.
- World Bank. (2016). World Development Indicators. Retrieved February 5, 2016, from <http://data.worldbank.org>