

# STRUCTURAL ADJUSTMENT, CAPITAL FLIGHT, AND THE REPRODUCTION OF GLOBAL INEQUALITY

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The financial haemorrhaging of low-income countries in the form of (illicit) capital flight is a leading cause of global economic inequality. On an annual basis, trillions of dollars bypass the already starved fiscal spaces of nations mired in poverty, making their way instead to lucrative offshore bank accounts governed by secrecy jurisdictions. The present paper relates this phenomenon to the institutional architecture of the global financial system and provides causal evidence that structural adjustment programmes implemented in low- and middle-income countries at the behest of international financial organisations amplify such capital flight. In particular, by isolating exogenous variation in policy conditionalities through the use of instrumental variables, we find that trade liberalisation, financial sector reforms, and privatisation measures mandated by the International Monetary Fund in developing contexts substantially increase financial outflows occurring via current and capital account transactions. Our findings thus document the contribution that structural adjustment makes to a major yet under-appreciated facet of contemporary global inequality.

## INTRODUCTION

Sub-Saharan Africa, one of the world's most deprived geographical regions, is a net creditor to high-income countries. Such is the conclusion of an extensive body of research comparing sub-Saharan African nations' external assets — as measured by the cumulative stock of private wealth deposited abroad — to their external debts, with the former exceeding the latter by nearly \$2 trillion (Ajayi and Ndikumana 2015). This empirical observation extends beyond the African continent, with recent estimates suggesting that net financial outflows across all low- and middle-income countries amount to approximately \$2 trillion annually, with over \$16 trillion having been drained out in total since 1980 (GFI 2016). A substantial portion of this offshored wealth is made up of illicitly acquired or illicitly transferred assets that are deposited in lucrative bank accounts in secrecy jurisdictions by well-connected domestic elites. The latter successfully siphon off their privatised fortunes through the deliberate manipulation of current and capital account transactions, including the use of trade mis-invoicing or simple money laundering (Ndikumana and Boyce 2011; Ajayi and Ndikumana 2015; Shaxson 2016). Previous evidence suggests that capital flight, especially from the world's poorest countries, is debt-fuelled, as for every

dollar of loan inflows, between 60 and 80 cents flow out in the same year (Ndikumana, Boyce and Ndiaye 2015). Growing financial outflows since the turn of the century thus involve a “revolving door” linking external borrowing to capital flight through the transformation of public loans into private assets by local ruling classes (Ndikumana and Boyce 2003; Ndikumana, Boyce and Ndiaye 2015).

Much of the extant literature on the financial haemorrhaging of low-income countries laments the institutional backwardness of kleptocratic polities in the global periphery, as epitomised by the persistence of endemic corruption, the lack of democratic accountability, and ultimately “poor governance” (Abed and Gupta 2002; Kar 2011; Stephenson et al. 2011; see discussion in Ayogu and Gbadebo-Smith 2015). However, little attention is paid to how capital outflows on such a striking scale (whether licit or illicit) are facilitated by the normative and organisational integration of such polities into the institutional architecture of the global financial system. The systematic offshoring of embezzled wealth is predicated on the durable provision of exclusive private banking services by a tight-knit yet globally operant cartel of commercial entities typically headquartered in London, New York, or Paris (Messa 2015; Shaxson 2016). These very same entities tend to accumulate foreign government debt on their internal balance sheets — leading to the seemingly paradoxical scenario in which international creditors help facilitate the illicit appropriation by private individuals of the funds they themselves have extended to public authorities. In the words of one commentator, “the borrowers [steal] the money and the lenders [help] them steal it” (Raymond Baker quoted in Ndikumana and Boyce 2011: 30).

Anchored in a historically distinctive but durably embedded incentive structure at the core of global credit markets, this apparent conundrum derives from a unique alignment of the material and ideological interests of creditors and debtors whereby illicit capital acquisition and capital movement form part of an interlocking (and highly profitable) dynamic. On the borrower side, the contraction of public liabilities is motivated by the privatisation of their monetary value and the socialisation of the corresponding cost: whilst a powerful and wealthy upper stratum of society appropriates incoming financial assets for personal gain, the attendant debt burden is borne by the general population through the national government. On the lender side, the issuance of loans — typically effected through the indexed purchase of sovereign bonds at a significant discount to par — is motivated by the prospect of their twofold return, first in illicit form when deposited abroad by foreign elites and, second, in licit form through multilaterally enforced debt servicing by fiscally distressed yet politically constrained foreign governments.

This paper focuses on the international institutional forces that underpin the phenomenon of (illicit) capital flight. By drawing on previous scholarship in sociology and political economy, we develop a theoretical framework in which capital flight derives from a dual dynamic, characterised by the structural integration of low- and middle-income countries into the financial architecture of the world economy on the one hand, and, on the other, by the globalised yet concentrated capacity of financial capital to extract eco-

nomic surplus through the reproduction of core-periphery relations. Our empirical focus is on the International Monetary Fund (IMF), which constitutes a distinctive institutional vehicle by which global financial arrangements are moulded and magnified. In its capacity as lender of last resort, as provider of technical assistance, and as an agent of economic surveillance, the IMF is somewhat ambiguously positioned with respect to the phenomenon of capital flight. On the one hand, its policy interventions in developing contexts target widespread corruption and financial crime by instigating cooperative efforts to enhance transparency in the financial system and to build domestic state capacities to address illicit activities. On the other hand, the Fund fashions and furnishes the policy scripts that provide the political and economic conditions under which extensive capital mobility, and hence capital flight, can take root. Its power to impose a comprehensive array of domestic policy reforms — known as “conditionalities” — is closely tied to its active protection of international creditor rights and the vested interests of its shareholders. Its bailout loans to countries in fiscal disarray are made conditional upon wide-ranging structural adjustments that align domestic policy arrangements with those of dominant forces in the world economy — most notably via trade liberalisation, privatisation, and financial sector reforms — and shift national revenue away from public investment and towards external debt servicing (Babb 2005; Babb and Carruthers 2008; Kentikelenis, Stubbs and King 2016; Babb and Kentikelenis 2018; Roos 2019).

By drawing on sociological theory, we construe the IMF not as a disinterested purveyor of neutral organisational templates but as a vector of structural inequality in the world order. We hypothesise that structural adjustment policies are causally related to the rapid outflow of capital from its client countries and we empirically validate our hypotheses through an instrumental variable approach. Using a unique data set capturing (a) all foreign deposits held in secrecy jurisdictions by private individuals in low- and middle-income countries and (b) all policy reforms stipulated in all IMF programmes between 2000 and 2018, we isolate exogenous variation in policy conditionalities across 180 developing countries, and we identify a robust amplifying effect of IMF intervention on capital flight. To our knowledge, this is the first systematic investigation of this causal relation. Our findings have potentially profound implications, both for the scientific understanding of the causes of capital flight and for the assessment of structural adjustment policies. These policies play a vital role in determining resource allocations within and between countries, and their continued implementation durably affects the future of the world economy. In light of the deeply consequential nature of large-scale financial outflows in low-income contexts, our analysis suggests that policy scripts diffused by international multilateral organisations like the IMF actively contribute to the reproduction of global poverty and inequality.

## THE POLITICAL ECONOMY OF CAPITAL FLIGHT

Capital flight from developing contexts is a leading cause of global inequality, both within and between nations (Shaxson 2016; Cobham et al. 2017). On an annual basis, trillions of dollars bypass the already starved fiscal spaces of nations mired in poverty, making their way instead to lucrative offshore bank accounts governed by secrecy jurisdictions. The distributional effects of such outflows are at least fourfold. First, the logistical capacity of domestic elites to shield their private wealth not only from the public sphere but also from rampant currency depreciation can serve to deepen the gulf between rich and poor. The persistent embezzlement of public funds by well-connected domestic elites erodes scarce government resources, saps state capacities, and fuels corruption. Irrecoverable capital outflows lead to substantial losses in potential tax revenues, which in turn weaken public investment (Ajayi 2015). Second, increasing capital flight can lead to additional pressure on currency exchange rates, thus amplifying the disruptive impacts of currency depreciation by initiating novel speculative attacks. Since exchange rate fluctuations can severely disrupt the logistics of resource allocation in low-income countries, this in turn has the potential to deepen poverty traps and corrode social welfare. As such, other things held constant, capital flight also undermines poverty reduction efforts (Nkurunziza 2015) and quells broader economic development, especially in countries experiencing armed conflict (Weeks 2015). Third, debt-fuelled capital flight involves not only the private appropriation of externally borrowed funds but also the socialisation of attendant costs, which are disproportionately levied on society's most vulnerable through fiscal austerity and heightened social insecurity. Fourth, on an international scale, the consistent recourse to offshore tax havens actively shapes cross-border income distributions and intensifies global tax competition (Zucman 2017; Alstadsæter, Johannesen, and Zucman 2018; Coppola et al. 2020; Tørsløv, Wier and Zucman 2020). Meanwhile, the parallel amplification of external borrowing, financial flight, and continued debt servicing forms a self-perpetuating cycle by which unequal core-periphery relations are permanently reproduced (Roos 2019).

It follows that capital flight, both licit and illicit, is an important determinant of global social inequality, yet it remains an inchoate domain of sociological investigation. To address this gap, we now shed further light on the anatomy of large-scale capital flight in this section and the next. We first outline the mechanisms by which global financial flows of the kind described above occur and identify their institutional underpinnings. Second, we retrace the historical origins of capital flight to a sequence of pivotal political and economic changes unfolding since the Second World War, involving the rise of global capital mobility and the enhanced structural power of finance. In the next section, we link these empirical insights to the policy repertoire promoted by the IMF across the developing world, before proceeding to the articulation of a sociological theory of the causal relation between structural adjustment and capital flight that will motivate our subsequent empirical analysis.

## THE MECHANICS OF CAPITAL FLIGHT

In this paper, capital flight is broadly defined as the rapid transferral of economic assets from one jurisdiction to another — typically in response to speculative attacks on local currencies, as a means of shielding private wealth or corporate profits from regulatory scrutiny, or in pursuit of lucrative offshore services (or indeed all of the above). Such financial flows are of two principal kinds: those that appear in the official record of transactions between a country and the rest of the world, and those that do not. Either category may involve a combination of licit and illicit operations, as when embezzled money is licitly moved abroad or when legally acquired capital is hidden from view via the deliberate manipulation of balance-of-payments statements (above and beyond net technical errors and omissions).

The mutually reinforcing relations between foreign borrowing and capital flight are anchored in a singular incentive structure at the heart of global financial markets. From the perspective of international creditors, the purchase of sovereign debt — typically at a significant discount of up to 90% — is a lucrative business, as floating interest rates, commonly indexed to the London Interbank Offered Rate, generate substantial net gains upon repayment whilst additional profits accrue from loan origination fees (sums subtracted upfront from loan disbursements) and interest rate spread (Ndikumana and Boyce 2011). Moreover, financial capital in high-income countries can rely on strong governments and powerful multilateral organisations — such as the IMF and the World Bank — to sanction its claims and enforce continued debt servicing by foreign governments (Roos 2019). This allows a select group of commercial banks to serve as international creditors, even to countries with severely underdeveloped financial institutions, and to do so at a profit regardless of whether the loaned funds are embezzled by private individuals (see for instance FACTI 2020). In fact, the very same commercial entities that purchase sovereign debt typically also provide exclusive international banking services to debtor country elites who are looking to deposit their illicitly acquired private assets abroad (Shaxson 2016). Meanwhile, from the borrowers' perspective, the usage of kickbacks and padded procurement contracts (*inter alia*) impel the continued amassing of public liabilities. As the monetary value of borrowed funds is extracted by wealthy elites, attendant costs are shouldered by ordinary citizens through their national governments. In socially and politically unstable countries without adequate bureaucratic and organisational capacities to durably protect private property rights, embezzled goods are then siphoned off to foreign financial destinations.<sup>1</sup>

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<sup>1</sup>Besides siphoning out money from public procurements, business and political elites have become increasingly creative in rerouting export revenues from a variety of activities. Tajikistan is a case in point: since the early 2000s, the country's most important source of export revenues — aluminium producer Talco — has entered a tolling system with a holding in the Cayman Islands that allows well-connected political elites to appropriate revenues for private gain (Financial Times 2008).

Thus capital inflows and outflows are structurally entangled through the workings of global financial markets. The ultimate crux of this entanglement is the network of offshore banking centres that form globalised hubs of capital accumulation, anchored in politically stable secrecy jurisdictions that are designed to aid wealthy entities — be they private individuals or multinational corporations — seeking to shield their (licitly or illicitly acquired) assets from any form of external scrutiny (Messa 2015; Shaxson 2016; Zucman 2017). The world’s leading secrecy jurisdictions fall into three main categories: continental Europe (including Luxembourg, the Netherlands, and Switzerland), a prominent British zone (centred on London but extended across a grid of offshore satellites, including Bermuda, the Cayman Islands, and the Virgin Islands), and the United States (which has grown into a leading tax haven in recent decades). According to the Tax Justice Network, up to a quarter of all global wealth is held in such offshore locations, where special banking services include asset management and protection, invoicing services, and tax optimisation schemes (TJN 2012).

#### HISTORICISING CAPITAL FLIGHT

To better understand the causes and consequences of capital flight, its contemporary origins can be retraced to four distinctive historical dynamics. First, the 1958 global restoration of current account convertibility, whereby foreign currency conversion for commodity trade was permanently reintroduced after an extended hiatus, heralded a new age of capital mobility. After the Second World War, especially in the 1940s and 1950s, capital controls were widely implemented, with interest rates being capped, commercial bank investments regulated, and credit flows redirected towards strategic sectors by national governments. The return of current account convertibility weakened the efficacy of such controls as capital transactions could now be channelled via current accounts, notably through trade mis-invoicing (Eichengreen 2019; Pauly 2020). Thus a major mechanism of illicit capital flight was from that point on inscribed in the very fabric of the global financial order.

Second, the collapse of the Bretton Woods system in 1973 and the advent of floating exchange rates initiated novel responses to the pressure imparted by the rise of international capital mobility, especially amongst weak-currency countries seeking to protect their currency pegs against major trading partners. Yet the recourse to capital controls proved hard to sustain as the globalising expansion of finance, coupled with policy reform packages promoted by the IMF and the World Bank, led various developing countries to adopt liberalisation policies to attract foreign business (Wade 2002; Babb and Buira 2004; Babb 2005). This development accelerated the structural integration of low-income nations into the mesh of global financial markets and deepened their dependence on the availability of foreign credit for domestic economic purposes (see Cardoso and Faletto 1979; Evans 1979).

Third, the parallel concentration of global credit markets has served to cement the aforementioned incentive structure linking an increasingly tight-knit conglomerate of private banks in high-income countries to the domestic elites of peripheral borrower nations. This has involved (a) the growing accumulation of sovereign bonds by private portfolio investors, rendering low-income countries increasingly vulnerable to speculative attacks capable of triggering sharp currency depreciation and other disruptive spillovers; (b) the effective financing of illicit wealth extraction in developing contexts, as outlined above; and (c) the power of a small group of private banks to control international credit lines, to mobilise the protective interventionism of multilateral financial organisations in times of economic turbulence, and to durably align the material interests of foreign elites with their own as a threefold means of enforcing debtor compliance (Roos 2019).

Fourth, and relatedly, the logistical and organisational substrates of illicit capital flight have culminated in the consolidation of an offshore banking system since the 1980s. Developed in response to war-related hikes in corporate tax rates over the course of the twentieth century, the offshore system is rooted in the growth of legal secrecy provisions designed to attract foreign capital, with criminal money being legally protected from regulatory probing (Shaxson 2016; FACTI 2020).

## THE IMF AND GLOBAL FINANCIAL (DIS)ORDER

At first sight, the IMF is uniquely positioned as a leading vanguard against illicit financial flows. Besides advocating for the implementation of traditional quantitative measures to reduce speculative pressures on local currencies, the Fund cooperates with authorities to enhance transparency in the financial system and concentrates its efforts on capacity-building measures targeting financial authorities (IMF 1999; Kern, Reinsberg, and Göring 2019). Furthermore, the IMF often supports large-scale anti-corruption campaigns, trains revenue administrations to limit the scope for tax evasion, assists in drafting anti-money laundering legislation, and assists in stolen asset recovery programs (IMF 2011, 2019, 2020a, 2020b). The Fund’s executive board has also approved a new framework that widens its mandate to engage with a broad range of governance-related issues pertaining to illicit capital flight (IMF 2018).<sup>2</sup>

However, the extant literature suggests that the kind of comprehensive overhaul of a country’s state administration that is associated with the IMF’s structural loan conditions has the potential to impose concentrated losses on key social groups, including the upper echelons of society. Designed to eliminate previously granted privileges, structural conditions can impel private actors and civil servants alike to seek novel ways of maintaining their upper hand (Callaghy, 1989; Coate and Morris, 2006). As such, various types

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<sup>2</sup>For instance, in the recent case of the Ukraine, the IMF has threatened the administration in Kyiv to withhold much needed financial relief because “because it is worried the country’s president won’t recoup billions of dollars allegedly looted from banks” (Wall Street Journal 2019).

of conditionalities can incentivise local elites to engage in corrupt practices (Reinsberg, Kentikelenis, and Stubbs 2019; Reinsberg et al. 2019) — for instance by offshoring their private wealth.

Moreover, key features of structural adjustment programmes — including those that in theory are meant to prevent illicit outflows — have the potential to facilitate capital flight through various pathways. For instance, the push for financial liberalisation since the 1980s has been premised upon the assumption that financial reforms would improve resource allocation, encourage savings, and strengthen the rate of return to domestic investment, thereby reducing capital outflows. However, there is little evidence to support this prediction (Hermes and Lensink 2015), especially since capital flight seems unrelated to portfolio choice. This is conveyed by how risk-adjusted rates of return on capital in low-income countries compared to the rest of the world fail to predict the magnitude of financial in- and outflows (Ndikumana, Boyce and Ndiaye 2015). Instead, wide-ranging financial reforms, including the removal of restrictions on international banking practices, can foster a high presence of foreign banks within a setting characterised by underdeveloped financial institutions, weak banking regulatory and supervisory frameworks, and fragile (or abrogated) capital controls (Hermes and Lensink 2015, Massa 2015), all of which may ease the exit of capital from a country (Joyce and Noy 2008; Mukherjee and Singer 2010; Moschella 2012; Chapman et al. 2017). For instance, capital flight dynamics in the wake of the Asian financial crisis of 1997–1998 have been associated with the IMF’s financial sector reforms (Beja et al. 2002). Similarly, the disruptive transformation of the Russian economy in the early 1990s — under the auspices of the IMF — has reportedly set in motion large-scale capital outflows (e.g. Perotti 2002).

In a similar vein, privatisation measures can in theory be employed to block the diversion of funds from public to private hands, just as fiscal austerity can pre-empt artificially inflated public procurement costs, yet evidence suggests that such policies typically foster higher market concentration and attendant rent extraction (Bjorvatn and Søreide 2005; Drazen 2006; Reinsberg, Kentikelenis, and Stubbs 2019), above and beyond their other deleterious effects (Stuckler and Basu 2013). Other examples include premature external sector reforms geared towards trade liberalisation that ease the illicit manipulation of current and capital account transactions, notably in the case of trade mis-invoicing (GFI 2010; Patnaik, Gupta, and Shah 2012), and IMF reforms that hollow out the state and precipitate bureaucratic decline (Reinsberg et al. 2019). Such reforms can readily undermine a government’s corruption control capacities (Reinsberg, Kentikelenis, and Stubbs 2019) and thus facilitate further outflows.

## STRUCTURAL ADJUSTMENT AND CAPITAL FLIGHT: A SOCIOLOGICAL THEORY

In light of the above, we espouse an analytic approach that connects theory and evidence surrounding structural adjustment and capital flight in a sociologically unified framework.



On the one hand, from the perspective of world polity theory, the IMF may be construed as a source of institutional isomorphism (DiMaggio and Powell 1991; Meyer et al. 1997), driving both normative and organisational integration through the global diffusion of multilaterally articulated policy scripts (Kentikelenis and Seabrooke 2017). Its impact on capital outflows from developing countries may be said to be imparted through a distinct mix of coercive, mimetic, and normative institutional isomorphic change (DiMaggio and Powell 1983), stemming from its unique role — as global lender of last resort — in upholding global financial stability, with inadvertent spillovers on illicit capital flows. On the other hand, although sociologists operating within this framework acknowledge that the world polity is a locus of political struggle between unequally equipped actors (Beckfield 2003, 2010), both world systems analysis and dependency theory would place greater emphasis on the role of international financial organisations in perpetuating asymmetric relations of power between an advanced core and a global periphery (Baran 1957; Frank 1967; Wallerstein 1974; Amin 1976; Cardoso and Faletto 1979; Chase-Dunn 1998), which illicit financial flows only serve to exacerbate (Shaxson 2016). According to this perspective, the relation between structural adjustment and capital flight may be viewed as an important manifestation of how globally diffused policy repertoires ensure the reproduction of durable inequality in the world system (see Kvangraven 2020).

In this article, we provide a conceptual synthesis in which capital flight derives from a dual dynamic, characterised by the structural integration of low- and middle-income countries into the financial architecture of the world economy (including the growing importance of offshore secrecy jurisdictions) on the one hand, and, on the other, by the globalised yet concentrated capacity of financial capital to extract economic surplus through the reproduction of core-periphery relations. This involves a tangled triangular connection between financial capitalists in high-income countries, domestic elites in low- and middle-income countries, and the increasingly central mediating role of multilateral financial organisations. The IMF’s principal role in this process is to meet a structural need, wrought by the growing reach of an international creditors’ cartel, to operate as a global lender of last resort capable of conditionally extending much-needed credit to fiscally distressed borrowers in order to prevent, at all cost, a wave of sovereign default in the global periphery that would cause major financial upheaval amongst over-exposed banks in Western countries (Roos 2019). The Fund thus embodies an institutional complex of disciplinary control whereby credit market access is carefully regulated and debtor compliance is vigorously enforced to protect the rights of international creditors. Its policy interventions form part of an extensive “action repertoire” (Tilly 2006) reflecting collective organisation from above (rather than from below — contrary to the scholarly connotations of the social movements literature). In short, we interpret the IMF not as a disinterested purveyor of neutral organisational templates, nor simply as a modernising force for institutional convergence swooping in to salvage the wretched of the earth, but as a vector of structural inequality (Hanley, King, and János 2002; Reinsberg et al. 2019)

that is susceptible to political pressures (Akerman, Weller and Pessoa 2020) and which internalises the vested interests of powerful political and economic agents (Babb and Buira 2004; Babb 2005).

However — in contradistinction to world polity, world systems, and dependency theories — we posit that the IMF is not a monolithic block whose interventions, whether smooth and mimetic or incongruous and coercive, exert homogeneous effects across all contexts. Rather, the Fund itself is a multilayered organisational space (one might even say a “field” [Bourdieu 1984]) of social struggle, involving the contentious politics of policy script-writing (Kentikelenis and Seabrooke 2017). As demonstrated by organisational scholars in sociology, institutional actors — including of the kind embodied by the IMF — are shaped by rival social groups vying to obtain key strategic advantages (e.g. Fligstein and McAdam 2011). These competing intra-organisational efforts will easily translate into a concatenation of relatively autonomous policy spaces that may or may not coalesce into a coherent whole. As we detail in the following section, we therefore expect the effects of structural adjustment programmes to be heterogeneous across policy domains, with some interventions offsetting or working at cross-purpose with others due to varying policy objectives.

## **HYPOTHESES, DATA, AND METHODS**

Having outlined how capital flight is anchored in the triangular ties between private banks, sovereign debt relations, and domestic elites via offshore secrecy jurisdictions, we now seek to empirically substantiate how multilateral financial organisations affect the (hidden) external wealth of nations. Our empirical goal is to better understand the international institutional forces that underpin the phenomenon of (illicit) capital flight. To do so, we ask: how do IMF programmes affect financial outflows from low- and middle-income countries? Robust empirical evidence relating capital flight to the operations of the IMF is scarce. There is suggestive evidence that some policy interventions, notably financial sector reforms, have contributed to capital outflows in select countries (e.g. Beja et al. 2002; Perotti 2002). It remains hard to gauge, however, the extent to which these estimates lend themselves to causal interpretation. To our knowledge, there are no systematic investigations of this topic that utilise cross-national panel data to isolate exogenous variation in policy conditionalities. In this article, we fill this gap using previously unavailable data and an instrumental variable approach.

Against the empirical and theoretical backdrop provided above, we hypothesise that

- (a) participation in IMF programmes leads to an uptick in capital flight.

However, we also expect these effects to be heterogeneous across policy domains. In particular, we hypothesise that

(b) conditionalities designed to curb money laundering and related financial flows will reduce capital flight,

though such mitigating effects may very well be offset by broader institutional reforms that weaken state capacities. We also expect that

(c) external sector reforms that liberalise trade and ease the exit of capital via current account transactions will trigger significant hikes in capital outflows;

(d) financial sector reforms promoting foreign bank penetration, private-sector control of major financial institutions, and capital account liberalisation, which further facilitate the transfer of wealth to foreign destinations in order to shield against devaluations and other market shocks;

(e) privatisation measures that facilitate market concentration and illicit value extraction, such as in the Russian case where the post-Communist seizure of recently privatised industries by powerful oligarchs was accompanied by the immediate shifting abroad of funds (Perotti 2002; Desai 2005).

To test our hypotheses, we employ a novel dataset comprising 180 countries between 2000 and 2018. Our outcome variable is a measure of cross-border capital flows in the form of bilateral bank deposits, which we coded from the Bank of International Settlements database (BIS 2020). The database provides information on the total quarterly sum of bilateral flows between commercial banks within a reporting country and commercial banks in each of the other countries. This information was then compiled to generate annualised flow measures.<sup>3</sup> These data constitute an important advance in the study of capital flight in that they allow us to isolate *de facto* bank transactions from national entities residing in emerging and developing countries into financial offshore destinations instead of relying on rough estimates of trade mis-invoicing derived from statistical residuals in a country's balance of payments.

We employ two sets of treatment variables to assess the effects of structural adjustment, both of which are drawn from the newly released IMF Monitor Database (Kentikelelis, Stubbs and King, 2016). On the one hand, we use a dichotomous indicator of whether a country is under an IMF programme to estimate an overall average treatment effect of

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<sup>3</sup>To illustrate the structure of these bilateral data, consider the example of the United Kingdom and the Ukraine. The United Kingdom would report the value of deposits in British banks owned by Ukrainian residents. This, however, does not include deposits held in British banks by Ukrainian firms that own a subsidiary in a third country — such deposits would be assigned to the third country (Andersen et al. 2020).

IMF intervention. On the other hand, to further probe the specific nature of structural (as opposed to quantitative) conditions and their relation to the outcome variable, we assess, in turn, the role of external sector reforms oriented towards trade liberalisation; financial sector reforms oriented towards the privatisation and liberalisation of financial institutions; governance-related institutional reforms that target corruption and money laundering; and IMF-mandated privatisations of state-owned enterprises.

Our data also include a series of control variables that may covary both with IMF programme participation and financial outflows. These may confound the relation between our treatment and outcome variables through economic pathways — for instance in the case of a financial crisis that precipitates both capital flight and the solicitation of financial assistance from the IMF — or through political pathways — as when political instability resulting in a coup d’état leads holders of capital to offshore their wealth for fear of having it seized, whilst countries experiencing such instability might simultaneously be more likely to rely on externally obtained credit for their economic survival. We thus include measures of the size of loan disbursements by the IMF, measured in millions of special drawing rights (SDR), to ensure that we are able to isolate policy-related treatment effects rather than general embezzlement patterns that are unrelated to IMF programmes; per capita gross domestic product (GDP) in constant 2010 US dollars; the annual inflation rate (WDI 2020); a binary financial crisis indicator (Laeven and Valencia 2013); total reserves in months of imports (WDI 2020); a binary indicator for the incidence of a coup d’état; the Polity IV democracy index; a global financial market volatility index (Scheubel and Stracca 2019); the US interest rate; the number of nationals residing abroad as refugees, asylum seekers, or humanitarian migrants (UNHCR 2020); and United Nations General Assembly (UNGA) voting alignment with the G7 countries (Bailey, Strezhnev, and Voeten 2015). The latter variable is construed as a proxy for geo-strategic alignment and is known to predict IMF programme participation (Dreher, Sturm and Vreeland 2015). In addition, it may plausibly relate to financial outflows to G7 countries. The rationale for including a measure of migrant populations is to eliminate the possibility that cross-border movements of natural persons would account for capital outflows. Descriptive statistics for all our variables are provided in TABLE 1.

To empirically examine the relation between structural adjustment and capital flight, we posit the following data-generating process:

$$\text{CAPFLIGHT}_{it} = \text{IMFPROG}_{it}\tau_1 + X_{it}\theta + \mu_i + \varphi_t + \varepsilon_{it}, \quad (1)$$

where  $\text{CAPFLIGHT}_{it}$  denotes capital flight from country  $i$  in year  $t$ ;  $\text{IMFPROG}$  is our dichotomous indicator of IMF programme participation;  $X$  is a vector of control variables;  $\mu$  captures time-invariant country-specific effects;  $\varphi$  measures time-fixed effects; and  $\varepsilon$  is a stochastic error term. Our principal quantity of interest is  $\tau_1$ , which measures the effect of IMF programmes on the outcome variable. However, in an observational study such as this, we do not control the source of variation in the treatment variable, nor can we know

**TABLE 1:** DESCRIPTIVE STATISTICS

STATISTIC	<i>N</i>	MEAN	ST. DEV.	MIN	MAX
Capital flight (\$)	3,775	3,484,490	14,394,687	-450	168,758,791
IMF programme participation	4,058	0.25	0.43	0	1
External sector conditionality	4,022	0.6	1.5	0	19
Financial sector conditionality	4,104	0.036	0.33	0	11
Privatisation conditionality	4,022	0.03	0.29	0	6
Institutional reform conditionality	4,022	0.04	0.26	0	6
Anti-money laundering conditionality	4,104	0.01	0.11	0	2
IMF loan size (millions of SDR)	3,240	202	1,790	0	47,714
GDP per capita (\$)	3,489	13,414	21,188	195	193,745
Inflation rate (%)	3,787	6.9	44.2	-29.7	2,630
Reserves in months of imports	3,021	4.9	5.1	0.01	79.2
Polity IV democracy index	3,592	4.2	6.2	-10.0	10.0
Coup d'état indicator	2,842	0.015	0.122	0.000	1.000
Market volatility index	2,925	20.2	7.5	11.6	40
UNGA voting alignment	3,648	-1.5	0.89	-3.7	1.4
US interest rate	3,888	2.2	1.9	0.5	6.0
Financial crisis indicator	4,104	0.033	0.180	0	1
External migrant population	4,104	152,219	748,383	0	13,211,097

for sure if our controls are sufficient to isolate exogenous variation in the treatment. Corresponding parameter estimates may therefore suffer from endogeneity bias. To address such concerns, we follow recent methodological advances in the study of IMF programmes (Lang 2016; Stubbs et al. 2018) by instrumenting for IMF programme participation. To do this, we adopt a compound instrument derived from the interaction between the Fund’s annual budget constraint and the country-specific average exposure to IMF programmes over the sample period. This instrument is relevant to the treatment insofar as liquidity concerns lead the IMF to impose more stringent loan conditions (Vreeland 2003; Lang 2016), yet it isolates exogenous variation in that annual budget constraints operate independently of any given country after netting out its correlation with the country-specific average exposure to IMF programmes (Stubbs et al. 2018). We thus obtain a two-stage regression model, with the following selection equation:

$$\text{IMFPROG}_{it} = \overline{\text{IMFPROG}}_i \times \text{IMFBUDG}_t \beta + X_{it} \eta + \alpha_i + \delta_t + \epsilon_{it}. \quad (2)$$

Here  $\overline{\text{IMFPROG}}_i$  is country  $i$ ’s average exposure to structural adjustment over the sample period and  $\text{IMFBUDG}_t$  is the Fund’s budgetary constraint in a given year, measured by proxy through the number of countries with an IMF programme in that year (Vreeland 2003). We then proceed to re-specifying MODEL (1) as follows:

$$\text{CAPFLIGHT}_{it} = \widehat{\text{IMFPROG}}_{it} \tau_1 + X_{it} \theta + \mu_i + \varphi_t + \varepsilon_{it}. \quad (3)$$

In this expression,  $\widehat{\text{IMFPROG}}$  is a vector of fitted values from MODEL (2). To empirically assess the strength of the chosen instrument, we compare the model in equation (2) to a restricted first-stage regression in which the effect  $\beta$  is set to be null, obtaining a  $\chi^2$  test statistic of 54 on 1 degree of freedom ( $p < 0.001$ ). Hence  $Z$  comfortably satisfies the benchmark for identifying a strong instrument (Staiger and Stock 1997). We adopt the same approach when assessing the effects of specific conditionalities by replacing the IMF programme indicator with a measure of individual policy domain conditions:

$$\text{CAPFLIGHT}_{it} = \widehat{\text{IMFCOND}}_{it} \tau_2 + X_{it} \theta + \mu_i + \varphi_t + \varepsilon_{it}, \quad (4)$$

with  $\widehat{\text{IMFCOND}}$  denoting the fitted values of an alternative selection equation — analogous to equation (2) — where a chosen structural condition is regressed against the interaction between the average country-specific conditionality exposure over the sample period and the number of countries with an IMF programme in that year. In this model, the causal parameter  $\tau_2$  becomes the principal quantity of interest. Unit- and time-fixed effects are included in all models, thereby isolating changes (measured as deviations from the mean) in foreign deposits held in offshore bank accounts *within* countries over time and eliminating any time-invariant confounders, whilst also controlling for any aggregate trends in capital movement affecting all countries simultaneously. All variance estimators

are consistent with serial autocorrelation, heteroskedasticity, and country-level clustering effects. All analyses are conducted in R, version 4.0.2 (R Core Team 2020).

A central threat to causal inference is the persistence of residual confounding. Given that we cannot empirically verify that our instrument is strictly exogenous, the probability of such unmeasured confounding is non-zero. To address this concern, we conduct a simple non-parametric sensitivity analysis that allows us to precisely quantify the amount of unmeasured confounding that would in theory be required to eliminate our estimated treatment effect  $\hat{\tau}$ . Taking the case of IMF programmes as a whole, let

$$\hat{\tau} = \mathbb{E}(\text{CAPFLIGHT} \mid \text{IMFPROG} = 1, X) - \mathbb{E}(\text{CAPFLIGHT} \mid \text{IMFPROG} = 0, X)$$

denote the expected difference in the outcome variable CAPFLIGHT for treatment and control units, respectively, net of our matrix of controls  $X$ , and let  $U$  denote an unmeasured confounder. Then the bias factor,  $\mathcal{B}$ , is defined as the difference between  $\hat{\tau}$  and what  $\hat{\tau}$  would have been had we controlled for  $U$  as well. We make the simplifying assumptions that  $U$  is binary and that the effect of  $U$  on CAPFLIGHT is the same across both treatment states (i.e., no  $U$ -by-IMFPROG interaction). We now define

$$\gamma = \mathbb{E}(\text{CAPFLIGHT} \mid U = 1, \text{IMFPROG}, X) - \mathbb{E}(\text{CAPFLIGHT} \mid U = 0, \text{IMFPROG}, X)$$

as the effect of the unmeasured confounder on the outcome, net of the treatment and control variables. We also define

$$\delta = \mathbb{P}(U = 1 \mid \text{IMFPROG} = 1, X) - \mathbb{P}(U = 1 \mid \text{IMFPROG} = 0, X)$$

as the difference in the prevalence of the unmeasured confounder between the treatment and control groups. The bias factor is then readily obtained as the product of these two sensitivity parameters:  $\mathcal{B} = \gamma \times \delta$  (VanderWeele and Arah 2011; VanderWeele 2015: 68–69). In assessing the sensitivity of our model coefficients to unmeasured confounding, we ask how large  $\gamma$  would have to be in order to reduce our estimated effect size  $\hat{\tau}$  to zero. We address this question by visualising how  $\mathcal{B}$  changes as the two sensitivity parameters (co)vary across a range of possible values.

## RESULTS

TABLE 2 displays results for MODEL (3). Column (A) shows estimates for a baseline model with a minimal set of control variables, indicating that participation in IMF programmes causes capital outflows to increase by \$23.1 million in a given year (95% confidence interval: [3.7, 42.5];  $p = 0.019$ ). In a two-way fixed effects regression, this is interpreted as the excess increase in capital flight within treated countries over the sample period that is attributable to their participation in IMF programmes, other things being

held constant. Due to our limited sample size and the increasing probability of multicollinearity when adding more control variables, this is our preferred model specification. However, for the sake of comparison, columns (B) and (C) show results for models with additional controls, to which the baseline effect estimate proves robust. That the estimated effect size increases across the three specifications might indicate attenuation bias caused by negative correlations with the previously omitted control variables. However, such bias can be considered negligible when taking estimation uncertainty into account. The estimated effect size is more than fivefold that of the average country-year outflow observed in our data (see TABLE 1). Such an effect can thus be considered substantively large, also when taking into account the relative size of developing economies which, in our sample, averages \$499,731 million in total GDP and \$13,414 in per capita GDP. In separate model specifications not displayed here, we find that up to one-fifth of this effect is accounted for by direct capital flows into the world’s most prominent offshore secrecy jurisdictions. Overall, this result confirms our principal hypothesis, namely that — on average — IMF programmes amplify the financial bleeding of developing countries.

To unpack and better understand the policies driving this average effect, we now turn to the study of specific conditionalities as per MODEL (4). To avoid cluttering our presentation with tables, we place our remaining results in the APPENDIX. To render our results more interpretable, we dichotomise the conditionality measures such that outputs can be interpreted as the average difference in capital flight between countries that do or do not receive a particular type of structural condition attached to their bailout loans. We begin with external sector reforms that are typically oriented towards trade liberalisation, the results for which are displayed in APPENDIX TABLE A1. The baseline model, shown in column (A), suggests that IMF-mandated external sector reforms increase capital outflows by \$20.7 million (95% confidence interval: [1.3, 40.1];  $p = 0.037$ ), net of IMF loan size, GDP per capita, rates of inflation, political instability, and the incidence of financial crises. The estimated effect is robust to additional controls, as indicated by the results in columns (B) and (C). The overall result suggests that trade liberalisation likely forms a central component of the IMF’s contribution to capital flight.

Next, we study the effects of financial sector conditions on capital outflows. As shown in APPENDIX TABLE A2, our baseline model suggests that the IMF’s reform packages targeting the privatisation and liberalisation of financial institutions increase capital flight by \$12.9 million (95% confidence interval: [1.7, 24.5],  $p = 0.025$ ). The parameter estimate is robust to additional controls, as evidenced by results shown in columns (B) and (C). We complement these results with the analysis of privatisation measures, as shown in APPENDIX TABLE A3. We note that this model fails to converge when including the measure of external migrants, and hence omit this control variable from the final model specification. The privatisation of state-owned enterprises is associated with \$29.6 million in excess outflows in the baseline model (95% confidence interval: [1.2, 58.0];  $p = 0.041$ ). The estimate itself is robust to additional controls — in fact, as in the previous models, the



**TABLE 2:** IMPACT OF IMF PROGRAMMES ON CAPITAL FLIGHT

	(A)	(B)	(C)
IMF PROGRAMME	23.1 (9.9; $p = 0.019$ )	28.9 (13.8; $p = 0.037$ )	29.6 (14.2; $p = 0.038$ )
IMF loan size	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
GDP per capita (logged)	8.0 (4.7)	13.8 (8.9)	13.9 (9.1)
Inflation rate	0.01 (0.01)	0.1 (0.03)	0.1 (0.03)
Coup d'état	0.1 (1.4)	-0.1 (2.4)	0.2 (2.4)
Financial crisis	2.4 (2.5)	0.9 (2.8)	0.7 (2.8)
Reserves		0.02 (0.1)	0.03 (0.1)
Market volatility index		-0.4 (0.2)	-0.7 (0.5)
Polity IV democracy index		-0.6 (0.4)	-0.6 (0.4)
UNGA voting alignment			-2.1 (2.0)
US interest rate			1.2 (1.2)
External migrant population			0.0 (0.0)
Observations	2,668	2,191	2,183

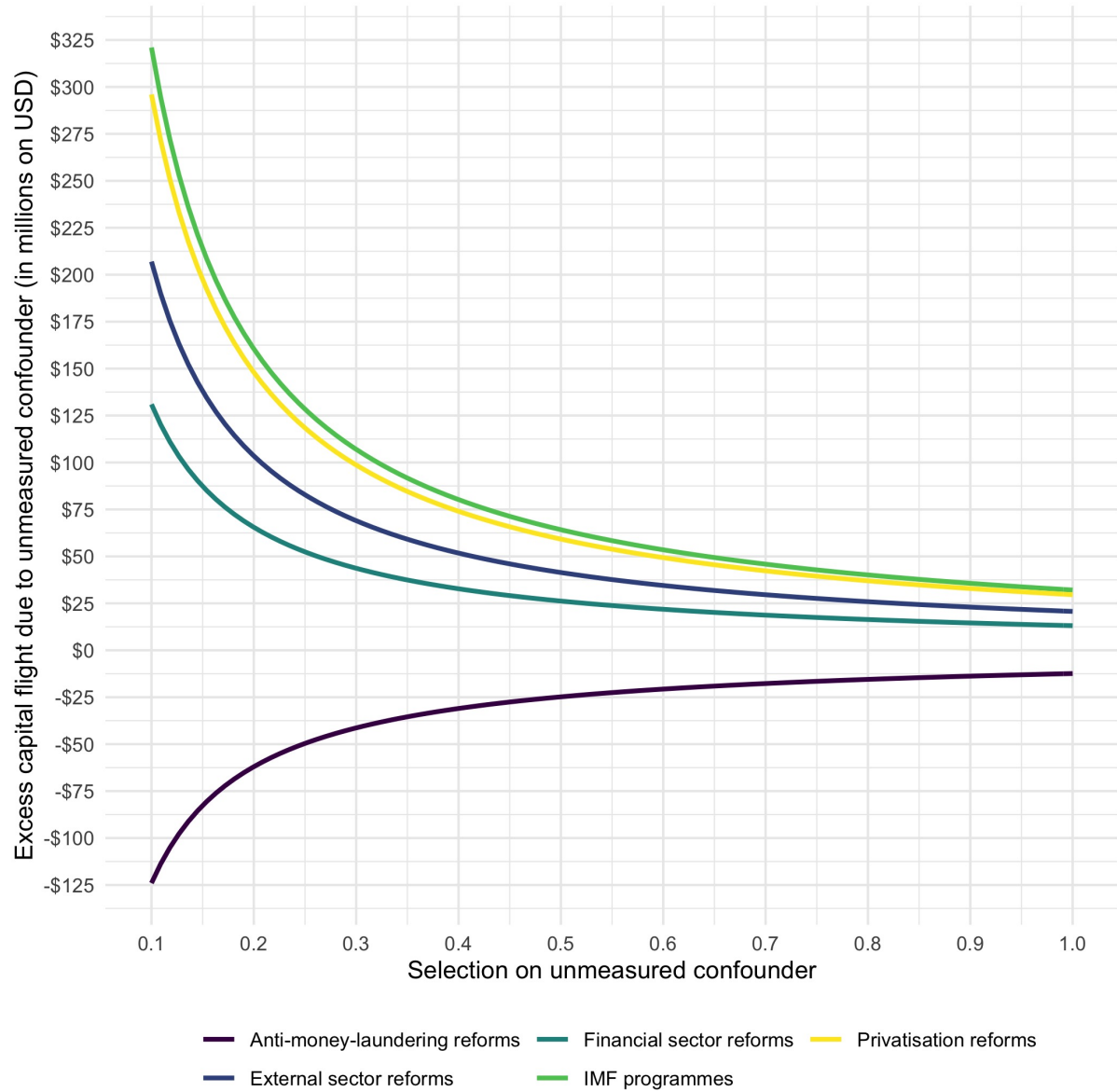
NOTES: The outcome variable is capital flight in US dollars from 180 low- and middle-income countries, as measured by within-country changes in private deposits held in offshore bank accounts; column (A) displays the outcome of a baseline regression with minimal control variables; the models shown in columns (B) and (C) adjust for additional covariates; all models are adjusted for unit- and time-fixed effects; the IMF PROGRAMME variable is instrumented as described in the methods section; parameter estimates are interpreted as within-country changes in capital outflows in millions of dollars; country-clustered standard errors consistent with serial autocorrelation and heteroskedasticity are shown below each parameter estimate;  $p$ -values are provided for the estimated treatment effect.

estimated effect size increases — but as evidenced by widening confidence intervals around the null across columns (B) and (C), it is subject to substantial estimation uncertainty.

We now assess whether IMF conditions that target corruption and money laundering have a significant impact on capital flight. We first run a model using a variable that aggregates across all institutional reforms, including anti-corruption policies and private sector development. We find no robust effects on the outcome variable and hence omit the result from display. However, this null finding is revelatory in and of itself insofar as it indicates that the IMF’s broader efforts to combat corruption on an institutional scale may be ineffective. Subsequently, we disaggregate such institutional reforms by focusing only on policies targeting money laundering. Results from this analysis are shown in APPENDIX TABLE A4. We find that anti-money laundering policies decrease capital outflows by \$12.4 million (95% confidence interval: [-24.4, -0.4];  $p = 0.043$ ), though the estimated effect is accompanied by substantial estimation uncertainty with additional controls. Taken together, these findings suggest that certain conditionalities may help prevent capital flight, but they appear to be outsized — by a substantial margin — by other policy effects working in the opposite direction. In addition, the latter finding lends further credence to our causal identification strategy, since if our models were merely picking up endogenous associations between IMF interventions and capital flight, we would expect all parameter estimates to have the same sign across all conditionalities. The fact that the estimated impact of policies targeting money laundering differs from that of other policies suggests that we are able to distinguish between substantively heterogeneous policy domains and their respective impacts on our outcome of interest.

We proceed to assessing the robustness of our estimated treatment effect to the presence of unmeasured confounding. FIGURE 1 visualises variation in the bias factor  $\mathcal{B}$ , as defined earlier, for each of our treatment variables across a range of possible values of the two sensitivity parameters  $\delta$  and  $\gamma$ . The X-axis denotes the degree of selection on the unmeasured confounder across the two treatment states (ranging from 0 to 1, with higher values indicating a higher prevalence of the confounder in the treatment group, i.e., in countries with IMF programmes), whereas the Y-axis denotes the magnitude of the effect of  $U$  on the outcome, above and beyond that of the treatment and the control variables, that would be required to completely eliminate the effect of programmes on capital flight. In light of the argument concerning the exogeneity of our chosen instrument, we believe it is plausible that the amount of residual confounding — if there is any — remains moderate. As such, the most likely values of  $\delta$  would be at the lower end of the X-axis in FIGURE 1. At  $\delta = 0.1$ ,  $U$  would have to cause an excess within-country outflow of capital that consistently lies above \$125 million for all treatment variables, except for anti-money-laundering reforms, for which  $U$  would have to reduce outflows by roughly the same amount. This amounts to a net effect that outweighs the average country-year outflow in our sample by a factor of nearly 40. Even at higher levels of selection on the unmeasured confounder, the net impact of  $U$  would have to be substantively large in

order to explain away our estimated treatment effects. As such, the sensitivity analysis suggests that a substantial amount of unmeasured confounding would be needed to cast serious doubt on our causal estimates.



**FIGURE 1:** Sensitivity analysis plot to assess residual confounding of the estimated effect of IMF programmes and conditionalities on capital flight as per TABLES 2–A4, column (A). Values of  $\delta$  (X-axis) and  $\gamma$  (Y-axis) that lie on the solid lines would completely eliminate the estimated treatment effects.

## CONCLUDING DISCUSSION

Our analysis has provided causal evidence that structural adjustment programmes implemented in low- and middle-income countries at the behest of international financial organisations amplify capital flight. In particular, by isolating exogenous variation in policy conditionalities through the use of instrumental variables, we find that trade liberalisation, financial sector reforms, and privatisation measures mandated by the International Monetary Fund in developing contexts increase financial outflows occurring via current and capital account transactions. We also find that certain institutional reforms targeting corruption and money laundering may help prevent financial haemorrhaging, but their effects seem to be largely offset by incongruous interventions in other policy domains that dwarf any mitigating impact. Our findings thus document the contribution that structural adjustment makes to a major yet under-appreciated facet of contemporary global inequality.

To our knowledge, this is the first systematic investigation of this causal relation. Our findings have potentially profound implications, both for the scientific understanding of the causes of capital flight and for the assessment of structural adjustment policies. These policies play a vital role in shaping the developmental trajectories of low- and middle-income countries and our analysis suggests that their politically controversial nature is well founded. We have related the causal nexus between structural adjustment and capital flight to the broader institutional infrastructure of the global financial system wherein the continued monetisation of debt fuels an upward distribution of wealth from borrowers to lenders, from public hands in the developing world to private hands in the advanced core (Hickel 2017; Roos 2019).

Our findings imply that the IMF’s persistent enforcement of debtor compliance amongst its clients is (at best) ironic as long as its own policies substantially aggravate their acute financial haemorrhaging. Its efforts to address corruption, to enhance financial transparency, and to promote economic development are rendered moot by its continued alignment with an increasingly powerful conglomerate of international creditors that benefit twice from the periphery’s plight — once through the offshore banking system and once through the repayment of odious debts by fiscally distressed yet politically constrained foreign governments (Ndikumana and Boyce 2011).

Meanwhile, in their current form, structural adjustment policies appear to do little but bolster the mechanisms by which the economic value of sovereign liabilities are privatised by the already privileged, who subsequently shift their wealth abroad, whilst the attendant burden — both political and economic — is thrust upon ordinary citizens. In other words, as an institutional maker and mediator of core-periphery relations that are historically anchored in the logic of colonial extraction (see Ogle 2020; Shaxson 2016), the IMF effectively operates as a vector of structural inequality in the world order.

The paper makes three principal contributions to the discipline of sociology. First,

it generates a distinctly sociological account of capital flight, which remains an underdeveloped topic of sociological research despite its central role in shaping and perpetuating durable social inequalities. It does so by forging an empirically grounded yet theoretically informed framework that spotlights the mediating role of offshore secrecy jurisdictions in the reproduction of core-periphery relations. At the centre of this framework lays the structural dyad by which elite incentives in the Global South are durably aligned with those of financial capital in the Global North, at the detriment of the general population. Second, our paper contributes to the sociology of structural adjustment and, more broadly, of international financial organisations by relating — for the first time — the policy prescriptions of the IMF to the phenomenon of (illicit) capital flight and its upstream institutional determinants. This sheds fresh light on the political and economic consequences of IMF programmes and instigates novel avenues for future research. Finally, our paper showcases how the discipline of sociology can offer analytically distinctive assessments of deeply consequential policy repertoires that operate on a global scale. We hope that our analysis can inform the work of researchers and policy makers who seek to address and redress the root causes of illicit financial flows.

We acknowledge the limitations of our analysis. Given the illicit nature of a substantial portion of all capital flight, we cannot be confident that our data capture all relevant dynamics of substantive interest and our analysis is likely to suffer from measurement error. Banking reports compiled by the BIS are submitted on the basis of data specifications that can vary between reporting countries, which places limits on the harmonisation and cross-national comparability of our capital flight data. Moreover, the limited sample size undermines our statistical power to probe various causal relations of interest. We recognise the substantial amount of estimation uncertainty accompanying our model estimates and the lack of means to further explore substantively important pathways and interactions. Furthermore, we acknowledge that capital flight can emerge in a myriad number of ways that do not always lend themselves to the kind of macroscopic econometric analysis conducted here.

Nevertheless, we have drawn on a unique data set that significantly advances the study of cross-border financial flows over time, and our ability to isolate exogenous variation in IMF policies through the use of a compound instrumentation technique allows us to derive unbiased estimates of the causal parameters of interest. Our findings withstand a range of sensitivity checks and they extend and amend previous findings in the field. In short, despite its inevitable limitations, our analysis offers novel and robust empirical evidence that policy scripts diffused by international multilateral organisations like the IMF actively contribute to the reproduction of global poverty and inequality through their amplification of capital flight.

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## **APPENDIX**

Conditionality model outputs below.

**TABLE A1:** IMPACT OF IMF-MANDATED EXTERNAL SECTOR REFORMS ON CAPITAL FLIGHT

	(A)	(B)	(C)
EXTERNAL SECTOR CONDITIONS	20.7 (9.9; $p = 0.037$ )	25.1 (12.6; $p = 0.047$ )	25.0 (12.6; $p = 0.047$ )
IMF loan size	-0.0 (0.0)	-0.0 (0.0)	-0.0 (0.0)
GDP per capita (logged)	5.6 (4.1)	8.5 (7.2)	7.9 (7.0)
Inflation rate	0.01 (0.01)	0.04 (0.03)	0.04 (0.03)
Coup d'état	2.3 (1.7)	3.4 (3.2)	3.4 (3.1)
Financial crisis	3.9 (3.3)	2.6 (3.6)	2.7 (3.5)
Reserves		-0.1 (0.1)	-0.1 (0.1)
Market volatility index		-0.5 (0.2)	-0.6 (0.3)
Polity IV democracy index		-0.5 (0.3)	-0.5 (0.3)
UNGA voting alignment			-1.8 (1.5)
US interest rate			0.2 (0.8)
External migrant population			0.000 (0.000)
Observations	2,298	1,897	1,897

NOTES: The outcome variable is capital flight in US dollars from 180 low- and middle-income countries, as measured by within-country changes in private deposits held in offshore bank accounts; column (A) displays the outcome of a baseline regression with minimal control variables; the models shown in columns (B) and (C) adjust for additional covariates; all models are adjusted for unit- and time-fixed effects; the EXTERNAL SECTOR CONDITIONS variable is instrumented as described in the methods section; parameter estimates are interpreted as within-country changes in capital outflows in millions of dollars; country-clustered standard errors consistent with serial autocorrelation and heteroskedasticity are shown below each parameter estimate;  $p$ -values are provided for the estimated treatment effect.

**TABLE A2:** IMPACT OF IMF-MANDATED FINANCIAL SECTOR REFORMS ON CAPITAL FLIGHT

	(A)	(B)	(C)
FINANCIAL SECTOR CONDITIONS	13.1 (5.8; $p = 0.025$ )	13.6 (6.4; $p = 0.033$ )	14.2 (6.6; $p = 0.032$ )
IMF loan size	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)
GDP per capita (logged)	−2.1 (1.6)	−4.2 (2.9)	−4.4 (3.0)
Inflation rate	0.001 (0.001)	0.01 (0.01)	0.01 (0.01)
Coup d'état	−0.2 (0.7)	−1.0 (1.3)	−0.7 (1.2)
Financial crisis	5.1 (2.8)	4.6 (2.7)	4.6 (2.7)
Reserves		−0.1 (0.1)	−0.1 (0.1)
Market volatility index		−0.4 (0.2)	−0.3 (0.1)
Polity IV democracy index		−0.1 (0.1)	−0.1 (0.1)
UNGA voting alignment			−1.4 (0.8)
US interest rate			−0.4 (0.6)
External migrant population			−0.000 (0.000)
Observations	2,668	2,191	2,183

NOTES: The outcome variable is capital flight in US dollars from 180 low- and middle-income countries, as measured by within-country changes in private deposits held in offshore bank accounts; column (A) displays the outcome of a baseline regression with minimal control variables; the models shown in columns (B) and (C) adjust for additional covariates; all models are adjusted for unit- and time-fixed effects; the FINANCIAL SECTOR CONDITIONS variable is instrumented as described in the methods section; parameter estimates are interpreted as within-country changes in capital outflows in millions of dollars; country-clustered standard errors consistent with serial autocorrelation and heteroskedasticity are shown below each parameter estimate;  $p$ -values are provided for the estimated treatment effect.



**TABLE A3:** IMPACT OF IMF-MANDATED PRIVATISATION REFORMS ON CAPITAL FLIGHT

	(A)	(B)	(C)
PRIVATISATION CONDITIONS	29.6 (14.5; $p = 0.041$ )	34.7 (17.9; $p = 0.052$ )	34.7 (18.0; $p = 0.054$ )
IMF loan size	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)
GDP per capita (logged)	−1.3 (2.3)	−1.6 (4.2)	−1.6 (4.2)
Inflation rate	0.002 (0.002)	0.005 (0.02)	0.005 (0.02)
Coup d'état	1.0 (0.8)	1.0 (1.0)	1.0 (1.0)
Financial crisis	5.6 (3.2)	5.1 (3.3)	5.1 (3.3)
Reserves		−0.04 (0.1)	−0.04 (0.1)
Market volatility index		−0.6 (0.2)	−0.4 (0.3)
Polity IV democracy index		0.04 (0.1)	0.04 (0.1)
UNGA voting alignment			−0.02 (1.1)
US interest rate			−0.3 (0.8)
Observations	2,298	1,897	1,897

NOTES: The outcome variable is capital flight in US dollars from 180 low- and middle-income countries, as measured by within-country changes in private deposits held in offshore bank accounts; column (A) displays the outcome of a baseline regression with minimal control variables; the models shown in columns (B) and (C) adjust for additional covariates; all models are adjusted for unit- and time-fixed effects; the PRIVATISATION CONDITIONS variable is instrumented as described in the methods section; parameter estimates are interpreted as within-country changes in capital outflows in millions of dollars; country-clustered standard errors consistent with serial autocorrelation and heteroskedasticity are shown below each parameter estimate;  $p$ -values are provided for the estimated treatment effect.

**TABLE A4:** IMPACT OF IMF-MANDATED ANTI-MONEY LAUNDERING REFORMS ON CAPITAL FLIGHT

	(A)	(B)	(C)
ANTI-MONEY-LAUNDERING CONDITIONS	−12.4 (6.1; $p = 0.043$ )	−12.4 (6.4; $p = 0.052$ )	−12.8 (6.6; $p = 0.052$ )
IMF loan size	−0.000 (0.000)	−0.000 (0.000)	−0.000 (0.000)
GDP per capita (logged)	−3.5 (1.9)	−5.9 (3.4)	−6.1 (3.5)
Inflation rate	0.001 (0.001)	0.005 (0.004)	0.004 (0.003)
Coup d'état	0.5 (0.4)	−0.1 (0.6)	−0.1 (0.6)
Financial crisis	6.3 (3.1)	5.9 (3.2)	6.0 (3.2)
Reserves		−0.04 (0.1)	−0.03 (0.1)
Market volatility index		−0.5 (0.2)	−0.4 (0.2)
Polity IV democracy index		−0.2 (0.1)	−0.2 (0.1)
UNGA voting alignment			−0.9 (0.6)
US interest rate			−0.1 (0.3)
External migrant population			0.000 (0.000)
Observations	2,668	2,191	2,183

NOTES: The outcome variable is capital flight in US dollars from 180 low- and middle-income countries, as measured by within-country changes in private deposits held in offshore bank accounts; column (A) displays the outcome of a baseline regression with minimal control variables; the models shown in columns (B) and (C) adjust for additional covariates; all models are adjusted for unit- and time-fixed effects; the ANTI-MONEY-LAUNDERING CONDITIONS variable is instrumented as described in the methods section; parameter estimates are interpreted as within-country changes in capital outflows in millions of dollars; country-clustered standard errors consistent with serial autocorrelation and heteroskedasticity are shown below each parameter estimate;  $p$ -values are provided for the estimated treatment effect.