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Research Report

SUSTAINABLE FOREIGN DIRECT INVESTMENT: THE NEED FOR ADAPTING INTERNATIONAL INVESTMENT LAWS TO MITIGATE INEQUALITY

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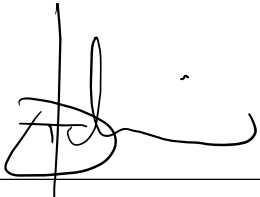
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DECLARATION

I, Daiyaan Halim, declare that this Research Report is my own unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Laws (by Coursework and Research Report) at the University of the Witwatersrand, Johannesburg. It has not been submitted for any degree or examination in this or any other university.



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Gracias por todo.

ABSTRACT

This paper considers whether sustainable foreign direct investment (FDI) in the renewable energy sector can reduce or mitigate inequality in developing countries within the framework of current international investment agreements (IIAs) and World Trade Organisation (WTO) rules. The paper utilises political systems theory to evaluate the policies that inform international investment laws and those necessary to promote development and inequality reductions. Drawing on principles of economics, it considers the effects of competition and deindustrialisation on labour markets and the role of skills-biased technological change in perpetuating inequality. To reduce inequality states must enter gateway activities within renewable energy value chains, upgrade domestic industries along the value chains, and limit competition. The paper recommends that states harness policy to attract investment within escalator industries, develop local productive capacity by generating demand and ensuring the transfer of skills, and put measures in place to mitigate inequality. However, the rules of international investment law limit the policy options available to states to realise these developmental outcomes. The paper concludes that if sustainable FDI is to avoid perpetuating inequality, legal reform is necessary to limit competition and increase the policy space that developing states require to implement developmental policies aimed at inequality reductions.

ACRONYMS AND ABBREVIATIONS

ASEAN	Association of South-East Asian Nations
BEE	Black Economic Empowerment
BIT	Bilateral Investment Treaty
BRICS	Brazil Russia India China South Africa
DSU	Dispute Settlement Unit
ESG	Environmental, Social and Governance
EU	European Union
FET	Fair and Equitable Treatment
FDI	Foreign Direct Investment
FTA	Free Trade Agreement / Area
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GNP	Gross National Product
GVC	Global Value Chain
ICSID	International Centre for the Settlement of Investment Disputes
IIA	International Investment Agreement
ILO	International Labour Organisation
ISDS	Investor-State Dispute Settlement
LCR	Local Content Requirement
Mercosur	Mercado Común del Sur (Southern Common Market)
MFN	Most Favoured Nation
MPRDA	Mineral and Petroleum Resources Development Act
NAFTA	North American Free Trade Agreement / Area
NT	National Treatment
PR	Performance Requirement
PTA	Preferential Trade Agreement / Area
PV	Photovoltaic
RTA	Regional Trade Agreement / Area

SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SEZ	Special Economic Zone
TCFD	Taskforce on Climate-related Financial Disclosures
TIP	Treaty with Investment Provisions
TRIMs	Agreement on Trade-Related Investment Measures
TRIPs	Agreement on Trade-Related Aspects of Intellectual Property
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USMCA	United States Mexico and Canada Agreement
US	United States
WTO	World Trade Organisation

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SUSTAINABLE FOREIGN DIRECT INVESTMENT: THE NEED FOR ADAPTING INTERNATIONAL INVESTMENT LAWS TO MITIGATE INEQUALITY

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I. INTRODUCTION

Extant geopolitical and economic shifts threaten the globalised system of production. Burgeoning economic nationalism, concerns around sustainability, and technological progress amidst a new industrial revolution are the proximate causes. The effects have manifested in declining flows of foreign direct investment (FDI) over the last decade, depriving developing countries of a vital source of capital for development. In response to these shifts and a global pandemic, developing countries are urged to direct investment towards sustainable FDI – investment for the realisation of sustainable development.

This paper evaluates whether sustainable FDI in the renewable energy sector can reduce or mitigate inequality in developing countries within the confines of prevailing international investment laws. The complex system of international investment agreements (IIAs) and trade laws that regulate FDI aim to facilitate flows by liberalising trade and capital markets, and promoting and protecting investments. The rapid adoption of these instruments during the 1990s accelerated FDI flows as countries achieved economic growth and convergence in income and living standards. However, despite narrowing income gaps between nations, national income inequality has increased. This rising inequality has been linked to FDI and the effects of the globalised system established by the prevailing international legal and policy framework.¹

This paper surfaces the conflicts between international investment law and the domestic policy outcomes necessary for developing countries to achieve reductions in inequality through

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¹ For example Pinelopi Koujianou Goldberg & Nina Pavenik 'Distributional Effects of Globalization in Developing Countries' (2007); Axel Dreher & Noel Gaston 'Has Globalization Increased Inequality?' (2008) 16 *Review of International Economics* 531; Also UN ESCAP *Asia Pacific Trade and Investment Report 2017: Channelling Trade and Investment into Sustainable Development* (2017), *UN Economic and Social Commission for Asia and the Pacific (ESCAP)*.

the development of a renewable energy sector. It is grounded in political systems theory in which international investment law is viewed as an output of a system informed by the demands and supports of an integrated global economic environment.²

As environmental inputs shift within the current geopolitical and economic context, this paper highlights how the international legal system has largely failed to respond to the feedback of widening national wage gaps. It demonstrates how, within the prevailing legal framework, investment aimed at achieving sustainable development could aggravate inequality if industrial support policies and mitigation measures are ignored.

The paper draws on themes from the legal and economics disciplines. A central theme is the lack of policy space available to states to pursue policies in their developmental interest. As such, the paper positions itself within the literature on legal reform. The argument for legal reform is grounded in a heterodox solution for reducing inequality. One that emphasises the role of industrial support.

It proceeds as follows. First, this paper outlines the fundamental principles of foreign direct investment and the international laws that govern it. Secondly, it details how the rapid rise in global investment has revealed evidence of convergence as well as rising inequality. With this context, it considers the merit of sustainable FDI as a silver bullet for mitigating inequality, sustainability, and developmental concerns. Thirdly, this paper returns to fundamental principles of development economics to outline the proximate causes of inequality within developing states and, upon this foundation, suggests policy outcomes for establishing a renewable energy industry that could absorb surplus labour and support high levels of economic growth to reduce wage disparities. Fourth, it provides a brief overview of international investment law and the policy outcomes it is designed to achieve. Namely, liberalising markets and promoting FDI through protection of investor interests. Finally, this paper turns to demonstrate how prevailing international investment law informed by conventional policy objectives prevents states from achieving the national developmental outcomes that could be realised through sustainable FDI in renewable energy.

² See James E. Anderson *Public Policymaking* 6 ed Boston, Houghton Miffling Company (2006) 18.

II. FOREIGN DIRECT INVESTMENT AND THE PROMISE OF GROWTH

Foreign direct investment (FDI) is investment by a multinational corporation resident in one country into an affiliate or subsidiary resident in another.⁴ Investment by the multinational typically consists of reinvested earnings, borrowings, and equity put to work in the production of capital goods and services. It involves a long-term interest and relationship between the multinational and the foreign subsidiary, distinguishing it from passive portfolio investments such as stocks, bonds, or financial instruments.

(a) Motives for FDI and integration into global value chains

When undertaking investment, multinationals select between the vertical or horizontal integration of the subsidiary into production lines and value chains. This strategic decision depends on the motives driving the investment.

Horizontally integrated subsidiaries are set up within the foreign market to replicate the production processes of the multinational parent.⁵ By directly accessing the foreign market, horizontal integration enables the multinational to increase its market size and overcome trade costs and restrictions otherwise incurred through export.⁶

Vertical integration splits the production process into its various components and locates activities in markets within which they could be performed most efficiently or in proximity to essential resources.⁷ Firms might locate more skills-intensive processes where skilled labour is abundant and labour-intensive processes where labour is relatively cheap.

Vertical integration enables firms to lower production costs by taking advantage of different factor endowments, cultures, institutional arrangements, economic systems, policies, and market structures available within each of the markets their activities are located.⁸ It gives rise to the formation of global value chains (GVCs) as each activity, from product conception

⁴ UNCTAD *Fact sheet #9: Foreign direct investment* (2019) 1.

⁵ Paul R Krugman et al *International economics: theory and policy* (2015) 225.

⁶ Alina Kudina & Malgorzata Jakubiak 'The Motives and Impediments to FDI in the CIS' 4; See: Evdokia Moïsé & Florian Le Bris 'Trade Costs - What Have We Learned?' (2013) 7.

Trade costs include direct and indirect costs such as non-tariff regulatory measures, market access restrictions, costs in transport infrastructure and logistics, customs compliance requirements, and administrative procedures.

⁷ Krugman et al op cit note 5 at 225.

⁸ Kudina & Jakubiak op cit note 6 at 4.

to the end of its lifecycle, is performed by firms and workers located in different countries. Intermediate goods are traded along the GVC with value added at each step until completion.⁹

(b) Theories of economic growth and convergence

FDI holds the potential for generating economic growth that supports convergence in living standards between nations.¹⁰ Convergence is realised, firstly, through competition between states to attract investment. Traditionally, the recipe for attracting FDI is straightforward – offer (or stimulate) a favourable domestic market, open to trade and capital flows, and reduce investment risks through macroeconomic and political stability.¹¹

In an open international market, competition between states to attract relatively scarce FDI establishes a “rise to the top” in investment standards and market conditions. Resultant macroeconomic and political stability, better infrastructure, and strengthened institutions encourage higher levels of productivity and growth. To this end, municipal and prevailing international investment laws play an enabling role by establishing those standards and supporting the conditions necessary to attract investors.

Secondly, once a country has attracted investment, the incorporation of capital and technology from investment into local industries increases productivity levels and, thus, income. Understanding this linkage is critical because the ability to achieve convergence in living standards is dependent on closing the income gap that separates developing and advanced nations.¹²

National incomes in developed states are higher than those in developing nations because firms and industries are highly productive. The use of advanced technologies and knowledge-based assets support greater levels of productivity which position developed industries towards the fore of the global technological frontier. By comparison, developing countries utilise approximately one-quarter of the technology used in developed states.¹³ The technological gap is, notably, more pronounced when technologies are new and advanced.¹⁴

⁹ Gary Gereffi & Karina Fernandez-Stark *Global Value Chain Analysis: A Primer* 2 ed (2016) 7.

¹⁰ James Crotty et al 'Multinational corporations in the neo-liberal regime' in Baker Dean, Epstein Gerald and Pollin Robert (eds), *Globalization and Progressive Economic Policy* 1 ed (1998) 2.

¹¹ Dani Rodrik *The Future of Economic Convergence* (2011), National Bureau of Economic Research 15.

¹² Crotty et al op cit 10.

¹³ Trade and Development Board *Foreign direct investment, the transfer and diffusion of technology, and sustainable development* (2010) 5.

¹⁴ Ibid at 6.

Closing the technological gap is the enabler of growth and convergence as national income is generated through productivity gains. Developing states need not develop technology nor rely on constrained domestic savings to develop capabilities. FDI enables them to borrow from global markets to finance capital and technology accumulations.¹⁵

Since firms in developing countries are further away from the frontier, the adoption of frontier technologies can support significant growth, at rates exceeding that of advanced states. Moreover, production gains are realised as domestic firms compete against more productive multinationals. These productivity improvements may equate to technological development at the level of the industry, improving production possibilities and supporting overall economic growth.¹⁶

(c) Upgrading through global value chains

Developing countries could achieve convergence by utilising FDI to enter GVCs and upgrade domestic industries. Developed countries usually have a presence in more skills-intensive, high value-added activities such as research and development, marketing, or services, while developing states generally concentrate on lower value-added activities such as assembly or production.¹⁷ Upgrading occurs as industries move from concentrations of labour-intensive, low value-added activities to more skills-intensive, technologically advanced, and high value-added activities along GVCs.¹⁸

Strategies to enter GVCs and upgrade industries require developing states to implement reforms focused on improving the dynamics of the local dimensions of the value chain – those dimensions falling within their control. There are three local dimensions which states could influence. First, upgrading may be supported through knowledge transfer. States could encourage the transfer of knowledge and skills by ensuring exposure to know-how and the participation of local workers and firms in increasingly skills-intensive activities.¹⁹ Secondly, states could influence the dynamics between industry stakeholders such as companies, workers,

¹⁵ Dani Rodrik *The Future of Economic Convergence* (2011) 10.

¹⁶ Krugman et al op cit note 5 at 232.

¹⁷ Ibid.

¹⁸ Gereffi & Fernandez-Stark op cit note 9 at 12.

¹⁹ Timothy J. Sturgeon & Gary Gereffi 'Measuring success in the global economy: international trade, industrial upgrading, and business function outsourcing in global value chains' (2009) 18 *Transnational Corporations*.

unions, educational institutions, and government to drive progress.²⁰ Thirdly, the local institutional context could be developed to establish comparative advantage within particular activities through improvements in skills development, ensuring political stability, and improving working conditions. This local institutional context is determined by the local, national, and international conditions and policies that shape a country's participation within the GVC.²¹

(d) The role of international investment law in supporting FDI

Traditional precepts for FDI policies targeting development might be best summed up in the Monterrey Consensus, born of the 2002 International Conference on Financing for Development and adopted by the 56th session of the UN General Assembly.²² The Consensus highlights the actions required by states to attract higher flows of productive capital targeting development. These actions align with the standards and conditions necessary to attract investment. They include establishing a transparent, stable, and predictable investment climate, respect for property rights and the establishment of strict contract enforcement mechanisms.²³

To give effect to these internationally determined actions, and to enhance investment inflows, the Consensus recommends that states prioritise the conclusion of regulatory frameworks to promote and protect investment.²⁴ As such, it may be inferred that states should elevate domestic decision making of the local dimensions to the international level by acceding to international investment laws contained in bilateral investment treaties (BITs) and other international investment agreements (IIAs).

Bilateral investment treaties are the primary instruments concerned with the promotion and protection of cross-border investment.²⁵ These instruments provide comprehensive rules for protecting foreign investment between two state parties and, in so doing, encourage FDI flows. The supposed benefits of BITs led to a surge in agreements concluded during the 1990s

²⁰ Ibid.

²¹ Ibid.

²² Report of the International Conference on Financing for Development, Monterrey, Mexico, 18-22 March 2002 2002 *Nations United* ("Monterrey Consensus"); UN General Assembly Resolution 56/210B on International Conference on Financing for Development 2002 A/RES/56/210 B.

²³ Monterrey Consensus para 21.

²⁴ Ibid.

²⁵ Jeswald W Salacuse & Nicholas P Sullivan 'Do BITs Really Work?: An Evaluation of Bilateral Investment Treaties and Their Grand Bargain' (2005) 46 *Harvard International Law Journal* 65.

as countries sought foreign investment to support their domestic industrialisation efforts.²⁶ In 1996, 180 BITs were concluded globally, and by 1997 there were 1,300 treaties involving 197 states.²⁷

The international regulatory framework regulating trade and investment flows is further supported by the World Trade Organisation (WTO).²⁸ The WTO was formed in 1995 by the conclusion of the Marrakesh Agreement.²⁹ It establishes the principal institutional framework for regulating international trade among its 164 member states. Within the WTO framework, the General Agreement on Trade in Services (GATS),³⁰ and the Agreement on Trade-Related Investment Measures (TRIMs)³¹ play significant roles in regulating FDI flows and the treatment of investors.

Under GATS, measures taken by states that affect trade in services are defined through four modes. Mode 3 encompasses commercial presence whereby services of a service supplier resident in one member state are provided by a subsidiary or locally-established office in another. Consequently, the provisions of GATS apply directly to service-related FDI.³² TRIMs prohibits member states from imposing performance requirements (PRs) or measures inconsistent with WTO obligations relating to investors' production and trade in goods.³³

²⁶ Mary Hallward-Driemeier 'Do Bilateral Investment Treaties Attract FDI? Only a bit... and they could bite.' in Sauvant Karl P. and Sachs Lisa E. (eds), *The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows* Oxford University Press (2009) 350.

²⁷ J Crotty, G Epstein, & P Kelly, 'Multinational corporations in the neo-liberal regime', in D Baker, G Epstein, & R Pollin (eds.) *Globalization and Progressive Economic Policy* (1998) 117 8.

²⁸ OECD, 'The Interaction Between Investment and Services Chapters in Selected Regional Trade Agreements', in *International Investment Law: Understanding Concepts and Tracking Innovations: A Companion Volume to International Investment Perspectives* (2008) 243.

²⁹ Marrakesh Agreement Establishing the World Trade Organization 1994 *WTO* 1867 U.N.T.S. 154 ("WTO Agreement"), Preamble.

³⁰ General Agreement on Trade in Services, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B 1994 *WTO* 1869 U.N.T.S. 183 ("GATS").

³¹ Agreement on Trade-Related Investment Measures, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A 1994 *WTO* 1868 U.N.T.S. 186 ("TRIMs").

³² Art. I:2 GATS.

³³ Art. 2:1 TRIMs; P Van den Bossche & W Zdouc *The Law and Policy of the World Trade Organisation: Text, Cases and Materials* 4 ed (2017) 47.

An exception to comprehensive multilateral trade regulation within the WTO framework is made for regional trade agreements (RTAs), which have too proliferated since the 1990s.³⁴ Concluded to facilitate closer economic integration between countries in the same region, RTAs such as the European Union (EU), North Atlantic Free Trade Area (NAFTA), Association of South-East Asian Nations (ASEAN), Mercosur, and Southern African Development Community (SADC) have become important actors in regional and cross-regional trade and investment.³⁵ With the formation of the NAFTA in 1994, RTAs began incorporating investment provisions over and above states' trade-related obligations. Today, RTAs frequently include investment chapters, providing investment protection measures based on GATS as well as BITs.³⁶

Broadly, BITs, RTAs incorporating investment chapters, and treaties containing investment provisions (TIPs) fit within the umbrella of IIAs.³⁷ International investment agreements give effect to states' international investment obligations in the absence of a multilateral mechanism or a comprehensive treaty to regulate FDI.³⁸ Like the other international instruments, IIAs have proliferated since the 1990s. By 2020, the number of BITs had reached 2,901, with 2,341 in force.³⁹

³⁴ Art. XXIV:5, Chapeau General Agreement on Tariffs and Trade, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A 1994 *WTO* 1867 U.N.T.S. 187 ("GATT");

Also see: Molly Leshner & Sébastien Miroudot *Analysis of the Economic Impact of Investment Provisions in Regional Trade Agreements* (2006) 6.

Note that, for brevity, references to RTAs in this paper include Free Trade Areas (FTAs) and Preferential Trade Agreements (PTAs).

³⁵ Van den Bossche & Zdouc op cit note 33 at 671.

³⁶ OECD 'The Interaction Between Investment and Services Chapters in Selected Regional Trade Agreements' in *International Investment Law: Understanding Concepts and Tracking Innovations: A Companion Volume to International Investment Perspectives* (2008) 244; Leshner & Miroudot op cit note 34 at 6.

³⁷ UNCTAD 'International Investment Agreements Navigator' (2020) available at <https://investmentpolicy.unctad.org/international-investment-agreements>, accessed on 27 November 2020.

³⁸ Nicolette Butler & Surya Subedi 'The Future of International Investment Regulation: Towards a World Investment Organisation?' (2017) 64 *Netherlands International Law Review* 44.

³⁹ UNCTAD op cit note 37.

III. A REVISIONIST ACCOUNT: RISING INEQUALITY AND FALLING FLOWS

During the 1990s, a wave of emerging and developing countries entered the global economy seeking the benefits of global integration to support rapid economic growth. Between 1991 and 1996, states had made 599 changes in their FDI regulatory regimes – ninety-five per cent of which were in the direction of liberalisation.⁴⁰

The spread of export-oriented industrial policies supported two consecutive decades of growth during the 1990s and 2000s, spurred by better technological improvements in production processes and communication. Global FDI flows grew significantly, with world inflows peaking at nearly US\$2 trillion in 2007, prior to the global financial crisis.⁴¹ This rise in FDI flows represented a significant increase in the activities of multinational corporations and, bringing with this, higher levels of trade.

Empirical studies show that FDI has had positive short-run impacts on job creation, local-subcontracted industries, and technology transfers.⁴² Productivity for the entire economy improves as FDI spreads its effects through competition and technology spill-over. By removing trade barriers, developing countries access larger export markets, and take advantage of FDI's long-run ability to stimulate export growth and improve their terms of trade.⁴³

There is also evidence of increasing and accelerating convergence, particularly at the regional level.⁴⁴ Growth in the developed world has slowed while it has sped up in developing regions. In the decade preceding the 2008 financial crisis, between 75 and 90 per cent of developing countries grew faster than the United States, closing the convergence gap by around three per cent per year.⁴⁵ Asia has steadily closed its income gap with rich countries since the 1970s and, between 2000 and 2010, Africa and Latin America appear to have turned a hitherto widening gap around.⁴⁶

⁴⁰ Crotty et al op cit note 10 at 8.

⁴¹ OECD 'OECD Data FDI flows (indicator)' available at <https://data.oecd.org/fdi/fdi-flows.htm>, accessed on 30 November 2020.

⁴² Lionel Fontagné *Foreign Direct Investment and International Trade: Complements or Substitutes* (1999).

⁴³ Rodrik op cit note 11 at 10.

⁴⁴ Arvind Subramanian 'Forces Driving Dominance: Convergence and Gravity' in *Eclipse: Living in the Shadow of China's Economic Dominance* Washington, Pearson Institute for International Economics (2011) 71.

⁴⁵ Ibid at 73.

⁴⁶ See Rodrik op cit note 11 at 8.

(a) *Rising inequality*⁴⁷

While FDI has contributed to economic growth and convergence at the national level, its distributional effects remains low.⁴⁸ When considered at the level of the state, the benefits of economic growth are concentrated among the few.⁴⁹ Despite declining levels of poverty, and evidence of convergence in incomes between states, both advanced and developing markets have witnessed rising levels of inequality.⁵⁰ Aggregated at a global level, the gap between rich and poor is at its widest in 30 years. The richest one per cent of the world's population has accumulated more wealth than the remaining 99 per cent combined.⁵¹

(b) *A shifting international investment climate*

Beginning in the 2010s, growth in trade and FDI began to decline. Following a mild recovery in the wake of the 2008 financial crisis, FDI flows have fallen steadily since 2015.⁵² By 2020, UNCTAD reported that the system of international production had approached an inflexion point which had turned to ignite a “decade of transformation for international production.”⁵³ Growing economic nationalism, represented by a rise in interventionist policies and a shift towards regional and bilateral frameworks, was among the proximate causes.

In 2018, for example, countries introduced at least 38 measures establishing new restrictions or regulations on FDI. This number represents the highest count of restrictions enacted in two decades.⁵⁴ States have also begun to more readily exercise their sovereign right to regulate the entry of foreign investment. In 2019, UNCTAD identified 28 states with new

⁴⁷ From a developmental perspective, economic inequality refers to the uneven distribution of incomes, wealth, education, health, and nutrition among population groups. Higher incomes allow individuals to expand wealth and improve standards of living. For the purposes of this paper, inequality refers to income inequality.

See: Helena Afonso et al *Concepts of Inequality: Development Issues No. 1* (2015) UN Department of Economic and Social Affairs, Available at

https://www.un.org/en/development/desa/policy/wess/wess_dev_issues/dsp_policy_01.pdf.

⁴⁸ ESCAP op cit note 1 at 101.

⁴⁹ UNESCO *Special edition: progress towards the Sustainable Development Goals - Report of the Secretary General* (2019) 16.

⁵⁰ ESCAP op cit note 1.

⁵¹ Resolution 2158 (2017) Fighting income inequality: a means of fostering social cohesion and economic development 2017 *Assembly Council of Europe Parliamentary* 2158 (2017).

⁵² OECD op cit note 41.

⁵³ UNCTAD *World Investment Report 2020: International Production Beyond the Pandemic* (2020).

⁵⁴ Ibid.

procedures in place to screen investors for national security reasons. Outside of national security screening, UNCTAD notes that inward investment has been restricted by other means. These include the imposition of restrictions on foreign land ownership, sectoral restrictions for foreign investment, or additional licensing conditions.⁵⁵

Higher barriers to investment contained in nationalist policies are at odds with principles of investment liberalisation and protection underpinning international investment law. This rise in investment restrictions has shifted the rules of international investment towards protectionism.⁵⁶

The transformation of production is further driven by international sustainability concerns regarding environmental, social, and governance (ESG) standards, supply chains, products, and processes. An emphasis on sustainability reflects a shift away from the traditional view of FDI as a means of profit and growth maximisation. There is increased recognition among firms and states that multinationals should integrate sound ESG practices and engage in responsible business conduct.⁵⁷ These measures may add to capital and operating costs for firms but mitigate investment risks and ensure positive investment impact.⁵⁸

Finally, the transformation is edged on by the fourth industrial revolution which threatens to split global value chains and introduce new forms of production.⁵⁹ The cumulative impact of these drivers was compounded by the COVID-19 Pandemic, on the back of which UNCTAD predicted a 40 per cent fall in FDI flows for 2020.⁶⁰

(c) Sustainable FDI as a solution

Within the context of a changing system and a shift away from integration, FDI remains a vital source of investment for development. By encouraging investment in strategic sectors, states

⁵⁵ UNCTAD *Investment Policy Monitor, National Security-Related Screening Mechanisms for Foreign Investment: An Analysis of Recent Policy Developments* (2019).

⁵⁶ UNCTAD op cit note 37 at 127; Ana Novik & Mark Wu *International Investment in the Age of Geopolitical Competition, Technological Change and Trade Confrontation* (2020).

⁵⁷ UNCTAD op cit note 53 at 151.

⁵⁸ See for example: TCFD *Recommendations of the Task Force on Climate-related Financial Disclosures* (2017) Financial Stability Board: Investment risks include the disruption of supply chains and international production, as well as regulatory and compliance issues, illustrative of the physical and transitional risks linked to climate change.

⁵⁹ UNCTAD op cit note 53 at 141.

⁶⁰ Ibid at xi.

might attract increasingly scarce FDI to finance sustainable activities while simultaneously reducing inequality or, at least, mitigating the effect.

To achieve these goals, UNCTAD's 2020 World Investment Report suggests that investment promotion strategies, focusing on production beyond the COVID-19 pandemic, should promote investment in the realisation of the Sustainable Development Goals (SDGs) contained in the UN General Assembly's 2015 'Transforming our world: the 2030 Agenda for Sustainable Development' resolution.⁶¹ This resolution provides global recognition that trade and investment can promote the realisation of sustainable development.⁶²

Among the resolution's seventeen SDGs, three aim to eliminate poverty, reduce inequality, and combat climate change respectively – suggesting that investment towards realising the SDGs could potentially resolve these issues. SDG 7, which relates to access to sustainable and modern energy, and SDG 10, which targets reductions in inequality, specifically recognise trade and investment as means for promoting sustainable development within their respective goals.⁶³ Similarly, albeit indirectly, SDG 17 refers to finance, policy coherence, technology transfers, and trade – key components of IIAs – as means for revitalising the partnership for sustainable development.⁶⁴

The 2030 Agenda recognises the importance of transferring environmentally sound technologies to developing countries, promoting investment in clean energy technology to ensure access to sustainable modern energy, and encouraging FDI to states where the need is greatest in an effort to reduce inequality.⁶⁵ A strategic sector for investment might, therefore, be found in the shift to renewable energy.⁶⁶

⁶¹ Ibid at 174.

⁶² UNEP *International investment agreements & sustainable development: Safeguarding policy praxe & mobilizing investment for a green economy* (2018) 4.

⁶³ Resolution adopted by the General Assembly on 25 September 2015: Transforming our world: the 2030 Agenda for Sustainable Development 2015 *Assembly United Nations General* ("2030 Agenda"); UNEP op cit note 62 at 4.

⁶⁴ UNEP op cit note 62 at 4.

⁶⁵ 2030 Agenda SDG 7.a and 10.b.

⁶⁶ See generally IFC *Climate Investment Opportunities in Emerging Markets, An IFC Analysis* (2016) *International Finance Corporation* 2.

(d) *Renewable energy investment as sustainable FDI*

Renewed investment in the construction of renewable energy plants and the generation of clean energy finds support in UNCTAD's recommendation that promotion strategies turn towards attracting FDI in infrastructure and services.⁶⁷ Similar proposals, highlighting green investment's growth and job creation potential, were common following the 2008 financial crisis.⁶⁸ The renewable energy sector is also a significant contributor to global FDI flows, suggesting that investment opportunities might remain steady.

International greenfield FDI, which refers to the formation of new investments as opposed to mergers and acquisitions, predominately comprises renewables.⁶⁹ Investments in the sector have grown consistently over the last decade and made up more than 50 per cent of all investment projects in 2019.⁷⁰ Such investment fits neatly within the goals of Agenda 2030 and offers potential for growth within the transforming system of international production.

From the perspective of economic growth, there are also substantial grounds to suggest that renewable energy can support convergence. Renewable energy is an advanced technology in respect of which the technological gap is more pronounced. As such, the rapid diffusion of this technology through FDI holds the potential for widespread advance in technological achievement among developing countries.⁷¹

For inequality to reduce through investment, a crucial factor is its ability to absorb low-skill labour. To that end, renewable energy is lauded for its labour intensity. The UNEP claims that greening economies, through a shift towards production of green goods and services, is a net generator of decent jobs that offer adequate wages, safe working conditions, job security, and reasonable worker rights.⁷² This view is shared by the UNFCCC secretariat and International Labour Organisation (ILO) which argue that taking action to mitigate climate change will create high-quality employment.

Despite the generally reported benefits for labour, few studies have been undertaken in developing countries to measure the impact of renewable energy on job creation. A World Bank review of energy and employment, for instance, tabulates results from 33 studies of which

⁶⁷ UNCTAD op cit note 53 at xiv.

⁶⁸ Alex Bowen & Karlygash Kuralbayeva *Looking for green jobs: the impact of green growth* (2015) 4.

⁶⁹ UNCTAD *World Investment Report 2019: Special Economic Zones* (2019) 11.

⁷⁰ UNCTAD op cit note 53 at 20.

⁷¹ Trade and Development Board op cit note 13 at 6.

⁷² Bowen & Kuralbayeva op cit note 68.

only five focused on some aspect of energy in developing states. In broader terms, the impact of climate change mitigation and adaptation policies on labour markets are mostly unknown, particularly for developing states.⁷³

Given the correlation between FDI and inequality under the existing IIA and WTO frameworks, it is necessary to evaluate the historical relationship between inequality and labour markets within developing countries to inform policy choices that seek to promote sustainable FDI.

IV. DRIVERS OF INEQUALITY AND THE MITIGATION POTENTIAL OF RENEWABLE ENERGY INVESTMENT

Inequality is driven by several factors. Among them are social and demographic trends, and cyclical factors such as economic downturns.⁷⁴ Global integration, enabled by trade and investment liberalisation, intensifies wage disparities through its effects on labour markets and political institutions in both developed and developing states.⁷⁵ These widening income gaps are closely related to labour market dynamics and the distribution of skills. Understanding the unique dynamics of developing economy markets can explain the structural determinants of inequality and guide solutions for addressing them.

(a) Understanding labour markets in developing economies

Developing economies may be characterised as dual-economies, made up of both a modern (formal) and traditional (informal) economy. The formal economy contains primary (agricultural), secondary (manufacturing), and tertiary (services) sectors. Econometric models typically assume high levels of employment in these formal sectors as substantial labour surpluses are represented within informal markets.⁷⁶

The informal economy consists of workers that do not participate or are not employed within the formal sector.⁷⁷ Self-employment and casual wage employment are prevalent. In the informal economy, workers offer fewer skills and the quality of human capital may be limited.

⁷³ Ibid.

⁷⁴ OECD *In It Together: Why Less Inequality Benefits All* (2015).

⁷⁵ Dreher & Gaston op cit note 1 at 520; OECD op cit note 74 at 23.

⁷⁶ Ibid.

⁷⁷ Ajit K Ghose 'Reinventing Development Economics' (2010) 45 *Economic and Political Weekly* 41.

Crucial factors of production, including capital, technology, and entrepreneurial ability, are absent.⁷⁸ As such, the informal sector is located furthest away from the technological frontier, and the productive capacity of both individual workers and industry is relatively low.

The formal economy has a virtually endless supply of labour from the informal market.⁷⁹ Unlike the informal sector, the formal economy has access to all factors of production and is, thus, far more productive.⁸⁰ It shares similar features to advanced economies. However, the primary sector is more extensive in developing economies due to a relatively high reliance on more labour-intensive agricultural production.

Wages of those employed in the formal economy are higher than the informal sector due to the presence of institutional arrangements such as unionisation. However, relative to advanced nations, wages within the formal labour market are lower, reflecting the effects of the labour surplus in the informal economy and lower productivity within the relatively larger primary sector.

As a result of these dynamics, developing and emerging markets hold comparative advantage in low-wage, labour intensive work. Moreover, wide disparities in wages and productivity characterise labour markets. At one end of the market, the informal and primary sectors are subject to low wages and low productivity. At the other, highly productive and skilled workers in the tertiary sector benefit from high wages.

(b) Drivers of inequality and lessons from the past

Increases in wage and productivity disparities drive inequality. Policies and investment aimed at enhancing productivity do not necessarily reduce the wage disparities within nations – and can aggravate them. Historically, this is due to two factors: a fall in wages due to the closure of firms, and skills-biased technological change.

(i) Competition, deindustrialisation, and the closure of firms

Both inward and outward FDI encourage competition that may trigger the closure of firms. Outward FDI has been shown to precipitate deindustrialisation and the collapse of industries owing to competition between states to attract it. The factors giving rise to falling FDI flows in recent years may exacerbate such deindustrialisation as competition to attract FDI intensifies, and existing investors shift their investments abroad.

⁷⁸ Ibid at 42.

⁷⁹ Ibid at 45.

⁸⁰ Ibid at 42.

As the bundling of production stages, reshoring of production, and regionalisation give rise to more concentrated value-addition and shorten value chains, the consolidation of production may lead to the collapse of firms in less competitive economies. Moreover, policies encouraging a shift away from fossil fuels toward sustainable industrial development could drive deindustrialisation in these sectors that will likely become increasingly uncompetitive.

Inward FDI has similarly led to the closure of firms. However, shutting down operations in this way is not due to competition between states but, rather, competition between multinationals and domestic firms within host markets. The entrance of multinationals into domestic markets, and the import of goods from abroad, both give rise to competition – and that competition is not necessarily fair.

Multinationals from developed states are far more productive than domestic firms due to the use of advanced technology and access to capital.⁸¹ Domestic firms may struggle to compete unless they match the productivity of multinational contenders by improving productivity. Larger firms, capable of improving technological abilities, may survive competition by increasing efficiency. However, the least efficient firms are usually forced to exit the market due to decreased demand for relatively expensive and uncompetitive products.⁸²

The closure of uncompetitive firms theoretically supports convergence. Based on assumptions of perfect factor mobility, convergence theory predicts that, when firms close, resources shift to more advanced sectors and activities, supporting economic growth and upgrading. Labour is employed at the same or higher levels of productivity by more profitable firms and industries.⁸³ The resultant concentration of activities around the most efficient firms boosts productivity to levels equating to technological development within the industry. Ultimately, productivity rises, leading to improved production possibilities for the economy overall.⁸⁴

However, an immediate consequence of firm closure is a fall in demand for labour at the level of the industry. Lower demand results in lower wages and, without sufficient reductions

⁸¹ Krugman et al op cit note 5 at 26.

⁸² Ibid.

⁸³ Justin Lin & Ha-Joon Chang 'Should Industrial Policy in Developing Countries Conform to Comparative Advantage or Defy it? A Debate Between Justin Lin and Ha-Joon Chang' (2009) 27 *Development Policy Review* 489.

⁸⁴ Krugman et al op cit note 5 at 232.

in real wages, lower demand for labour could lead to job losses.⁸⁵ Notably, the mere threat of relocation has been found to drive wage prices down and increase unemployment in advanced states.⁸⁶ These threats arise due to asymmetry in bargaining power in the competition for FDI. In these instances, it is difficult for workers to maintain wage levels when firms have lower wage sites available abroad – especially if these sites are favourable for FDI in other ways.⁸⁷

Due to the wide wage and productivity disparities in developing countries, the closure of firms could potentially lead to a fall in wages, rising unemployment and an increase in informality. This is because, contrary to the theory of perfect factor mobility, factors of production are generally fixed. When firms close, low-skilled labour, in particular, may be unable to relocate. Workers are also unlikely to have the requisite skills and would need to be re-trained.⁸⁸ While the introduction of new firms creates employment opportunities, they are likely insufficient to absorb all workers displaced.

In Argentina, the internal and external liberalisation of manufacturing and state-owned sectors in the 1990s had led to economy-wide improvements in productivity. However, the gains in productivity were, in part, the result of employment reductions due to improvements in technology. Theoretically, workers displaced by competition in previously protected activities should have ended up in jobs that were more productive. However, empirical evidence shows that informality and low-productivity services expanded.⁸⁹

(ii) *Capital-intensive investment and skills-biased technological change*

In advanced nations, deindustrialisation is frequently linked to the relocation of production to more efficient sites in developing states. A corresponding decline in domestic manufacturing, and the import of products to replace goods once produced locally, are the proximate causes of inequality.⁹⁰

In these states, long-run inequality is neither linked to a fall in wages nor a rise in unemployment. This is at least partially because lower wages and job losses have occurred only

⁸⁵ Ibid.; Dani Rodrick *Understanding South Africa's Economic Puzzles* (2006) Cambridge, MA, *National Bureau of Economic Research* 4.

⁸⁶ Francisco Perez-Arce et al 'Trends in Inequality.pdf' in *Inequality and Opportunity: The Relationship Between Income Inequality and Intergenerational Transmission of Income* (2016) 20.

⁸⁷ James Burke & Gerald Epstein 'Threat Effects and the Internationalization of Production' 49.

⁸⁸ Lin & Chang op cit note 83 at 489.

⁸⁹ Rodrik op cit note 11 at 32.

⁹⁰ Ibid; Perez-Arce et al op cit note 86 at 20.

in the short-run. In the long-run, workers have been drawn into new and more productive industries as theorised in models of perfect factor mobility.⁹¹ The resultant upgrading of industries and the receipt of more advanced inward FDI had led to skills-biased technological change which perpetuated income disparities.

Skills-biased technological change refers to economic growth that increases the demand for skilled labour as capital and technology are introduced. It is associated with capital-intensive FDI, which has limited capacity for labour absorption and inequality reductions.⁹² At the level of the industry, the introduction of capital-intensive technology increases production possibilities and generates economic growth by shifting resources into higher-value activities. However, higher levels of human capital and skills are required within these industries, improving returns to skill.

Resultantly, skills-biased technological change caused by capital-intensive FDI perpetuates a growing wage gap if wages at the tail end of the labour market are not improved at the same rate as those of skilled workers. The inability of low-skilled workers to access modern technology, due to relatively low human capital and skill, has been found to exacerbate inequality.⁹³

An example of inequality caused by skills-biased technological change occurred in the United States as manufacturing firms relocated to cheaper sites abroad, driving deindustrialisation. Growth transpired as industries upgraded into higher value-added activities. Despite this, the income gap between more and less educated workers, measured as earning differences between college graduates and the rest, had widened.⁹⁴

In the US, deindustrialisation coupled with receipts of more advanced inward FDI supported upgrading through an acceleration of technological change, rewarding skilled labour

⁹¹ Burke & Epstein op cit note 8791 at 21.

Further explanations for limiting unemployment increases are that wages of low-skilled workers had fallen sufficiently to avoid significant job losses, and a shift of US manufacturing firms abroad is offset by inward FDI.

See also Krugman et al op cit note 5 at 230.

⁹² Teresia Kaulihowa & Charles Adjasi 'FDI and income inequality in Africa' (2018) 46 *Oxford Development Studies* 263.

⁹³ Parantap Basu & Alessandra Guariglia 'Foreign Direct Investment, inequality, and growth' (2007) 29 *Journal of Macroeconomics* 837.

⁹⁴ Perez-Arce et al op cit note 86 at 20.

in higher value-added activities.⁹⁵ As workers improved their skills and transitioned into more skill-intensive sectors, the erosion of the low-skilled labour force facilitated a transition to a skills-based economy.⁹⁶ However, over time, the higher saturation of skills in the labour market slowed the speed at which more workers could accumulate skills.⁹⁷ Those with the highest skills were rewarded with higher wages, while lower-skilled workers struggled to catch up.

(iii) Combined skills-biased technological change and increased informality

It is possible for deindustrialisation and skills-biased technological change to coincide – exacerbating inequality. This has occurred, for example, in South Africa.

The shrinkage of South Africa's manufacturing sector since the 1990s has resulted in deindustrialisation and, at least theoretically, an increase in informality. However, the loss of labour-intensive manufacturing has not been accompanied by sufficient new investment in labour-intensive sectors.⁹⁸

As the manufacturing sector deindustrialised, strong unions ensured that real wages did not fall.⁹⁹ An insufficient fall in real wages encouraged job losses supporting growth of surplus labour. Moreover, real wages in South Africa are relatively high compared to countries of similar income levels which has discouraged inward investment motivated by low-wages.¹⁰⁰ Instead, South Africa has experienced an expansion of investment in the tertiary sector, particularly in financial intermediation and business services.¹⁰¹

The consequence is a decline in demand for low-skill labour and job losses on the one end of the labour market, accompanied by skills-biased technological change which rewards skilled workers on the other. As a result, South Africa has been unable to achieve high levels of growth and records extremely high levels of unemployment.¹⁰² It suffers one of the highest

⁹⁵ Burke & Epstein op cit note 91 at 21.

⁹⁶ Perez-Arce et al op cit note 86 at 20.

⁹⁷ Ibid.

⁹⁸ Patrick Bond 'Debt, Uneven Development and Capitalist Crisis in South Africa: from Moody's macroeconomic monitoring to Marikana microfinance *mashonisas*' (2013) 34 *Third World Quarterly* 578.

⁹⁹ Rodrick (2006) op cit note 85 at 4; See also Ghose op cit note 77 at 48.

¹⁰⁰ Rodrick (2006) op cit note 85 at 3.

¹⁰¹ Ibid 8; Bond op cit note 98 at 576.

¹⁰² Rodrick (2006) op cit note 85.

rates of income inequality in the world, with inequality linked to unemployment and returns to skill.¹⁰³

(c) *Theories for reducing inequality in developing states*

For developing countries, development requires reducing surplus labour and dualism.¹⁰⁴ Development occurs as resources, including labour, shift from primary (agricultural) and informal sectors to manufacturing and services.¹⁰⁵ When multinationals employ little labour, the developmental gains are limited.¹⁰⁶

Investing in labour-intensive activities, with high demand for low-skilled workers, minimises labour surpluses and the risk of inequality caused by skills-biased technological change. Instead, it supports improvements in human capital and enables workers to obtain the skills necessary for participation. The effect is an increase in wages at the primary end of the labour market, improved living standards, and potential reductions in inequality.¹⁰⁷

However, significantly high levels of economic growth in the formal sector are required to reduce surplus labour.¹⁰⁸ And an emphasis on labour-intensive investment does not necessarily support growth. Instead, it tends to concentrate in low-productivity activities within sectors located far from the technological frontier, such as agriculture.

Maximising economic growth is better achieved through capital-intensive investment that simultaneously holds the potential to absorb surplus labour. Such investment could shift labour out of unproductive activities and into more productive sectors in the process of development. Targeting both ends of the labour market, skilled and unskilled, in this way could simultaneously close the wage and skill gap while generating growth.¹⁰⁹ The key is to find those activities that are, essentially, capital-intensive with the capacity to absorb low-skill workers.

Fortunately, due to the greater dispersion of productivity across firms and industries, activities within developing economies are not uniformly behind the global technology

¹⁰³ Risenga Maluleke *Inequality Trends in South Africa: A multidimensional diagnostic of inequality* (2019) *Statistics South Africa* 6.

¹⁰⁴ Ghose op cit note 77 at 45.

¹⁰⁵ Ibid.

¹⁰⁶ Rodrik op cit note 11 at 8.

¹⁰⁷ Kaulihowa & Adjasi op cit note 92 at 263.

¹⁰⁸ Ghose op cit note 77 at 45.

¹⁰⁹ Ibid.; Kaulihowa & Adjasi op cit note 92 at 263.

frontier.¹¹⁰ It is possible that a particular firm or activity is more productive than the sector overall. Developing states can achieve rapid economic growth if they are able to push resources into activities within industries that are good at absorbing advanced technology as well as labour – so-called ‘escalator industries’ on the automatic escalator towards convergence.¹¹¹

Critical escalator activities are those in the production of tradeable goods and services. Production of goods and services for export can bolster growth through increased demand and improved terms of trade.¹¹² The manufacturing industry, in particular, is an archetypal escalator industry.¹¹³ Investment within the manufacturing of tradeable goods provides relatively positive returns as market size can be expanded by exports. Skills and technology are developed through initially imported equipment and high-skilled labour, and then developed through increasing returns to scale.¹¹⁴

(d) Evaluating renewable energy as an escalator industry

The renewable energy industry appears to be on the escalator up, providing opportunities for growth and labour absorption with the potential to reduce inequality. Due to the advanced nature of technologies, FDI in renewable energy is capital-intensive and could support growth.¹¹⁵ Investment in renewable energy also provides considerable scope for generating local employment.¹¹⁶ However, if the industry is to reduce inequality, it is insufficient that it offers jobs. The industry must be able to absorb low skilled workers and reduce labour surpluses, while limiting skills-biased technological change that rewards highly-skilled workers.

Within production value chains and project life-cycles of renewable energy industries, employment opportunities are primarily concentrated in the medium- and high-skilled portions of the labour market.¹¹⁷ Project development, for example, provides no low-skill jobs within solar technologies. Employment opportunities are concentrated among meteorologists,

¹¹⁰ Rodrik op cit note 11 at 23.

¹¹¹ Ibid.

¹¹² Krugman et al op cit note 5 at 710.

¹¹³ Rodrik op cit note 11 at 23.

¹¹⁴ Krugman et al op cit note 5 at 710.

¹¹⁵ ILO *Investment in renewables generates jobs. Supply of skilled workforce needs to catch up.* (2011) 5.

¹¹⁶ Ibid at 1.

¹¹⁷ Ibid at 4.

lawyers, lobbyists, land development advisors, and other professionals.¹¹⁸ Similarly, operations and maintenance in geo-thermal energy require middle- and high-skilled workers ranging from pipefitters and construction equipment operators to plant managers and engineers.¹¹⁹ Investment in renewable energy could, therefore, lead to skills-biased technological change unless escalator activities exist that create lower-skill opportunities within other segments of the value chain.

Downstream activities provide considerable potential for employment, particularly within project development, construction, and installation phases of the project lifecycle. In mature markets, at least 50 per cent of jobs are located in the downstream segment.¹²⁰ While project development encourages returns to skill, activities within construction and installation are the most labour intensive across all technologies.¹²¹

The trouble with downstream activities, particularly construction and installation, is that it is difficult for workers to relocate to future developments once a project is complete. In addition, the duration of individual employment in construction is relatively low. By way of comparison, a coal power plant with a lifespan of forty years creates a large number of jobs for a ten-year period before commencing generation. A wind farm only creates construction jobs for one to two years.¹²²

Following the completion of a project, firms are likely to source new workers in proximity to a new construction site (in view of little training required for low-skill work and high costs associated with worker transportation and housing). Due to imperfections in perfect factor mobility within developing economies, low-skill jobs in completed construction sites are likely to be lost.¹²³

The upstream segment of the renewable energy value chain offers better prospects. It provides long-term opportunities for low-skill workers in agricultural production and equipment manufacturing. Agricultural production for biomass offers relatively high labour-

¹¹⁸ Ibid.

¹¹⁹ Ibid.

¹²⁰ OECD *Overcoming Barriers to International Investment in Clean Energy, Green Finance, and Investment* (2015) 37. Available at <http://dx.doi.org/10.1787/9789264227064-en>.

¹²¹ Ibid at 39.

¹²² Jay Rutovitz *South African Energy Sector Jobs to 2030: How the Energy [R]evolution will create sustainable green jobs* (2010) Institute for Sustainable Futures, University of Technology, Sydney 10.

¹²³ Bowen & Kuralbayeva op cit note 68 at 16.

intensity.¹²⁴ In South Korea, for example, forest restoration is estimated to generate eight times as many jobs as the least labour-intensive green activity.¹²⁵ In China, biomass is expected to be nearly 30 times more effective at generating employment per dollar than wind energy.¹²⁶ However, because these industries are so far removed from the technological frontier, land management and agriculture offer limited potential for long-term gains for the economy overall.

Aligning with the assessment of manufacturing as the archetypal escalator industry, manufacturing activities provide the best opportunity for technological growth and low-skill labour absorption in renewable energy technologies. Although downstream construction in solar PV and hydro technologies provide higher levels of employment, the period of employment is significantly lower than that of wind tower and solar cell manufacturing.¹²⁷ Longer durations of employment in manufacturing offer the potential to support long-run gains. Within labour intensive manufacturing segments, the highest concentration of low-skill jobs is in the production of equipment. Most long-term opportunities are located within wind tower and solar PV technologies.¹²⁸ The key is to enter the manufacturing value chain in gateway activities in which the country already holds comparative advantage, such as component assembly, and to upgrade by taking on more complex processes in the production of low-carbon technologies.

(e) Developing renewable industries

For most developing states, entering the GVC through gateway activities requires FDI.¹²⁹ This is because the ability to attract initial investment and upgrade depends on the state's existing manufacturing base and whether there are scale and learning economies in the particular technology.¹³⁰ Most developing countries are unlikely to have comparative advantage in

¹²⁴ Rutovitz op cit note 122 at 15.

¹²⁵ Bowen & Kuralbayeva op cit note 68 at 18.

¹²⁶ Ibid.

¹²⁷ ILO op cit note 115 at 5; Rutovitz op cit note 122 at 14.

¹²⁸ Rutovitz op cit note 122 at 15.

Wind tower manufacturing provides 22.5 job years per MW and solar PV manufacturing 16.8 job years per MW.

¹²⁹ Bowen & Kuralbayeva op cit note 68 at 17.

¹³⁰ Ibid at 23.

required low-carbon innovation and manufacturing activities. Thus, few are able to develop renewable energy manufacturing industries – whether from the ground up, or through FDI.¹³¹

Only advanced nations and some emerging markets – higher-income states with more developed manufacturing and service sectors – have sufficient technological capabilities, at a sufficient scale, and with sufficient skill levels, to enter the production of basic low-carbon components and absorb advanced technology. The prohibitive nature of developing advanced manufacturing chains is reflected in the high concentration of renewable energy GVCs in emerging and advanced economies.¹³²

In the solar PV value chain, Asia accounted for 87 per cent of module production in 2013, while Germany, Switzerland, Japan, and China were among the largest producers of solar inverters.¹³³ The US, Germany, and China were the top producers and exporters of polysilicon, leaving little room left for new entrants.¹³⁴ Meanwhile, the top fifteen solar PV manufactures accounted for 50 per cent of global production, and nine of those companies were Chinese.¹³⁵ China was also responsible for production of 67 per cent of global module production – its dominance, at least partially, due to industrial support policies in the form of China’s Five-Year-Plan.¹³⁶ The increasing concentration and consolidation of the upstream industry reflects high levels of efficiency that firms within those states have obtained over time.

If developing states are successful in attracting renewable energy investment and establishing infant industries, domestic firms are unlikely to be competitive against more dominant players from abroad. Upgrading into higher-value activities may be unattainable.

In the absence of trade barriers, infant component manufacturers in emerging markets – whether successful in producing home-grown technologies or having gained a foothold into basic manufacturing or assembly value chains – would struggle to compete against the lower costs of low-carbon technologies imported from more efficient facilities in other emerging markets. Competition from imports produced by larger, more productive firms, or the entrance of those firms into the domestic market, may cause fledgeling manufacturing industries to

¹³¹ Ibid at 17.

¹³² OECD op cit note 74 at 33.

¹³³ Ibid at 32.

¹³⁴ Ibid.

¹³⁵ Ibid.

¹³⁶ Ibid.

shrink or collapse. The collapse of infant industries limits the ability to upgrade and potentially increases labour surpluses.

Within the current international investment climate, infant industries are, further, threatened by changes in government policy, reprioritisation of capital expenditure, and heightened regional trade barriers. These threats to global production raise the costs associated with FDI and could shrink renewable energy markets as firms shift production to more profitable locations. The collapse of renewable industries due to competition from advanced foreign firms could similarly contribute to widening inequality.

Further, if states are successful at attracting gateway manufacturing activities, other activities and industries along the domestic value chain – which serve to bolster demand and the growth of the manufacturing sector – might encourage skills-biased technological change. For example, if a country was successful at attracting investment in wind tower assembly, demand for assembled components is likely to be led by the development of wind farms. Constructing wind farms is dependent on high-skilled labour in the project development phase which supports skills-biased growth and provides relatively few short-term downstream employment opportunities.

(f) Policy implications

Ensuring sustained and accelerated growth requires policies that promote economic diversification and structural change away from low-productivity activities and towards higher-productivity activities, particularly within tradeable sectors that hold the capacity for expanding exports.¹³⁷ If the strategy is to pursue development and reduce inequality, states should encourage capital-intensive investment in advanced technologies with the capacity to absorb surplus labour. Such a strategy could close technological gaps, reduce wage disparities, and maximise development. The key is for states to get a toehold in activities within manufacturing in which they hold existing comparative advantage – gateway activities – and expand domestic employment within the industry overall.¹³⁸

These principles hold true for sustainable FDI the renewable energy industry. Maximising growth and inequality reductions by entering the renewable energy value chain can be achieved where investment is prioritised, specifically, in the manufacturing and

¹³⁷ Rodrik op cit note 11 at 4.

¹³⁸ Leonce Ndikumana & Sher Verick *The Linkages between FDI and Domestic Investment: Unravelling the Developmental Impact of Foreign Investment* (2007) Boston, University of Massachusetts Amherst 4.

assembly of solar PV and wind components. Investment in labour-intensive downstream activities and agricultural production linked to renewable energy GVCs is insufficient for realising long-term reductions in inequality. Contrary to the theory of perfect factor mobility, the wide labour market disparities in developing countries bolster the potential for job losses and increase informality once downstream construction and installation are complete. Taking advantage of low productivity and the oversupply of low-skill labour by promoting agricultural production would confine countries to the developmental status quo.

Development that generates growth and reduces inequality requires states to deploy renewable energy on a large enough scale with industrial support policies that encourage the development of local manufacturing and the use of domestic labour.¹³⁹ It is equally necessary to ensure that competition from technologically advanced and more efficient inward FDI does not stifle infant industry growth or lead to skills-biased technological change. Where these outcomes are not realised, it may be necessary to take steps to address inequality that may invariably arise.

To pursue this developmental strategy, states must utilise the levers within their control to improve dynamics within the local dimensions of the renewable energy value chain. The state must maximise the competitiveness of its market to persuade multinational firms to undertake the costs of investment. Once investment is received, states should encourage the transfer of technology (skills and knowledge) and the participation of local workers in order to upgrade.

Managing the relationships between industry stakeholders and strengthening the local institutional context is crucial for both attracting investment and upgrading. To this end, domestic policies are key. A policy designed to attract sustainable FDI must achieve the following outcomes:

- First, policies must facilitate integration into the global economy in a manner that prioritises investment with the potential to generate substantial growth and employment and reduce labour surpluses. They should limit investment and imports, and thus competition, from more efficient firms in activities in which the state has reasonable levels of comparative advantage and strong prospects for upgrading.

¹³⁹ Rutovitz op cit note 122 at 31.

- Secondly, policies must support upgrading and the development of local productive capacity through learning and innovation and generating domestic or regional demand.¹⁴⁰
- Thirdly, policies must correct for market failures and the adverse effects of competition, such as deindustrialisation and skills-biased technological change, that perpetuate inequality.

V. PROFIT AND RETURNS: POLICY CONSIDERATIONS AND INTERNATIONAL INVESTMENT LAW

The law is a critical policy output that may or may not support the realisation of the desired policy outcomes to maximise growth and mitigate inequality through sustainable FDI.¹⁴¹ While international law supports FDI flows, domestic policy and municipal law play the primary role in establishing the local conditions required to achieve the targeted policy outcomes.

Property rights and institutions are established, and macroeconomic economic policy determined, at the domestic level. Equally, barriers to trade and investment such as tariffs, taxes, subsidies, licences, capital controls, standards, and bureaucratic processes are subject to municipal law informed by domestic policy objectives. Governments decide whether to permit investment and may encourage FDI through incentives or regulate it by imposing a range of conditions or restrictions on trade and capital flows.¹⁴²

The manner in which domestic policy tools are applied can attract or discourage investment. Municipal law is thus a crucial factor in firms' initial investment decisions – likely more so than instruments of international economic law.¹⁴³ However, the relative ease with which domestic policy and market conditions could change after costs are sunk leads to potential risk and uncertainty for investors. Unexpected policy adjustments could negatively affect future cash flows and returns and decrease investment value.¹⁴⁴

¹⁴⁰ Ha-Joon Chang & Antonio Andreoni 'Industrial Policy in the 21st Century' (2020) 51 *Development and Change* 328; Rodrik op cit note 11 at 35.

¹⁴¹ Anderson op cit note 2 at 19.

¹⁴² Jeffery Atik 'Fairness and Managed Foreign Direct Investment' (1994) 32 *Columbia Journal of Transnational Law* 6.

¹⁴³ Salacuse & Sullivan op cit note 25.

¹⁴⁴ *Seterus paribus*; Kirt C. Butler & Domingo Castelo Joaquin, 'A Note on Political Risk and the Required Return on Foreign Direct Investment' (1998) 29 *Journal of International Business Studies* 599.

When states enter into IIAs, they reduce political and market risks for investors by elevating policy commitments to the level of international law. In doing so, states accept limitations on *de jure* policy sovereignty in exchange for the potential of investment.¹⁴⁵ The boundary at which policy sovereignty is limited is set by the policy considerations underlying international investment laws.

(a) Policy considerations underlying international investment laws

While domestic policy reflects the unique social, political, developmental, and institutional context of a particular state, international law is an output of the global political system. The content and outcomes of international policy are perhaps best captured in the collective agreements of state parties contained in international instruments. These instruments include international resolutions and the outcomes of conferences such as the Monterrey Consensus. Similarly, the more contemporary Addis Ababa Action Agenda reaffirms the Consensus and emphasises that FDI can contribute to sustainable development in alignment with Agenda 2030 and the SDGs.¹⁴⁶

According to the Consensus, attracting FDI for development requires states to create an enabling domestic environment, promote improvements in productivity and private sector activity, and reduce the risks of capital flight.¹⁴⁷ To action these requirements, states must effort towards guaranteeing proper contract enforcement, respecting property rights, developing sound institutions, and ensuring sound macro-economic management. These actions are, to a large extent, enforceable through IIAs.

In creating an enabling environment, the traditional role of the state is to offer a favourable market, integrate into the global economy, and protect investments from macroeconomic and political risk. By providing these conditions, states could attract FDI flows from investors seeking higher profits and returns.

(i) Offering favourable market conditions

Within the open and integrated global market, asymmetrical bargaining power between multinationals and states exists as a large number of national, regional, and local governments

¹⁴⁵ Jörg Mayer *Policy Space: What, for what, and where?* (2008) 4.

¹⁴⁶ Addis Ababa Action Agenda of the Third International Conference on Finance for Development 2015 ("Action Agenda"); 2030 Agenda para 40.

¹⁴⁷ Monterrey Consensus 7 para 10.

compete for relatively limited FDI.¹⁴⁸ Multinationals ultimately decide whether and where to invest and, if a state hopes to attract investment over another potential market, it should provide the necessary market conditions to enable the multinational to achieve its goals.

The firm's investment decision is invariably driven by its goal of maximising profit – ensuring returns on capital and the return of capital invested. Factors that influence profitability include the degree of market competition, price elasticities, market demand, and costs. Market size and costs reductions underpin the motives for investment and the form of integration – a strategic decision ultimately requiring a trade-off between per unit (production or trade) costs and fixed costs.¹⁴⁹

In the renewable energy sector, the wind industry is, for instance, horizontally integrated due to high trade costs associated with transporting components. Machine components are large and require special transportation equipment for trade. Technical barriers to trade, in the form divergent national standards, reinforce the need for local production. Wind turbine manufacturers are, thus, likely to invest in regional hubs close to emerging and large consumer markets.¹⁵⁰ A state hoping to develop a wind turbine manufacturing industry must offer sufficient demand for wind towers within the host market, or form part of an integrated regional market, to justify the firm's fixed costs and to enable it to attain sufficient returns to scale.

The solar PV industry, on the other hand, is typically vertically integrated with manufacturing and assembly of components conducted in various locations through GVCs. The firm's goal is to maximise value-added within that segment of the GVC and increase its competitive advantage over its rivals.¹⁵¹ If a host state aims to enter the solar PV GVC, it must offer production efficiencies such that the activity it hopes to attract is competitive against more mature solar manufacturing industries abroad.

Notably, if fixed costs are too high, they may negate the per-unit cost savings in production or trade. These fixed costs include the costs of setting up the subsidiary and are influenced by market characteristics such as infrastructure, taxes, and institutions. Providing adequate infrastructure, predictable (and low) taxes, and strong institutions are, therefore, critical to compete in an open global market.

¹⁴⁸ Burke & Epstein op cit note 87 at 28.

¹⁴⁹ Krugman et al op cit note 5 at 226.

¹⁵⁰ OECD op cit note 74 at 35.

¹⁵¹ Gereffi & Fernandez-Stark op cit note 9.

(ii) *Integration into the global economy*

By opening to trade and investment, states promote a competitive environment – a priority area according to the Monterrey Consensus.¹⁵² In order to achieve this, the Consensus expresses the need for meaningful liberalisation of markets and non-discrimination against investors, enhanced through market expanding RTAs and FTAs.¹⁵³

Opening to trade is critical for vertically integrated FDI and GVCs, and the development of solar manufacturing industries, as it lowers the costs of shipping intermediate goods. However, lowering trade costs can reduce the incentive for horizontal integration as firms could, instead, concentrate production in one country, generate returns to scale, and export the completed product.¹⁵⁴

If states hope to attract horizontally integrated FDI, they may, then, need to offer a particularly large market to incentivise investment. A state could increase its relative market size by removing regional trade barriers through RTAs and FTAs – an important consideration for market seeking investment such as wind tower manufacturing.¹⁵⁵

Further, opening to investment requires liberalising capital markets. Since capital is usually cheaper in developed markets, multinationals frequently raise capital at home and lend it to subsidiaries where capital costs are higher. By lending capital to their offshore subsidiaries, firms from developed states earn higher returns. As a result, capital and technology tend to flow from developed markets into developing and emerging economies. This trend is borne out by data showing that FDI inflows into developing countries in 2018, were nearly twice as high as outflows.¹⁵⁶ A state hoping to benefit from these inflows must open to them.

In addition, unrestricted freedom to receive returns and payment is essential to support GNP in capital-exporting states. Similarly, multinational parent companies and foreign suppliers respectively require returns and payment.¹⁵⁷ Any delay on payment raises opportunity costs in relation to the investment or transaction. Developing states may therefore be persuaded by their developed counterparts to offer unrestricted capital outflows in IIA negotiations.

¹⁵² Monterrey Consensus para 21.

¹⁵³ Ibid paras 26-27.

¹⁵⁴ Krugman et al op cit note 5 at 227.

¹⁵⁵ Leshner & Miroudot op cit note 34 at 8.

¹⁵⁶ UNCTAD '2019 e-Handbook of Statistics' (2020) available at

<https://stats.unctad.org/handbook/EconomicTrends/Fdi.html>, accessed on 30 November 2020.

¹⁵⁷ Salacuse & Sullivan op cit note 25 at 85.

(iii) Protection against macroeconomic and political risk

Market and political risks strongly influence investment decisions.¹⁵⁸ Political risks materialise when host countries unexpectedly change the rules and conditions underlying the business environment through legal, regulatory or policy interventions.¹⁵⁹ Their relationship with market or systematic risks, affecting the overall performance of a financial market, can impact the value of an investment. If states respond to market risks with interventions that penalise investors or compromise the investment, they reduce investors' returns.¹⁶⁰

Consequently, the Consensus emphasises the need for domestic policies aimed at reducing political and market risks and barriers to capital flows. According to the Consensus, these policy measures would achieve a transparent, stable, and predictable investment climate and increase support for FDI in infrastructure development.¹⁶¹

Host states must offer political stability, enforceable private property (including intellectual property) rights, and access to just and fair legal recourse to minimise political risks. In addition, they should provide macroeconomic stability and sound banking and financial institutions to mitigate against unexpected market risks realised through interactions with the global economy, the ordinary operation of the market, or political interference.

(b) The terms of international investment law

International investment law gives effect to the intended outcomes of international policy, and thus the profit seeking goals of multinational firms, through the dual aims of liberalising, and promoting and protecting investment.¹⁶² Bearing in mind that the content of international investment law is dispersed among the WTO Agreement and thousands of IIAs, the general terms supporting conventional policy objectives are set out below within the context of the dual aims of international investment law.

¹⁵⁸ Matthias Busse & Carsten Hefeker 'Political risk, institutions and foreign direct investment' (2007) 23 *European Journal of Political Economy* 410.

¹⁵⁹ Kirt C. Butler & Domingo Castelo Joaquin 'A Note on Political Risk and the Required Return on Foreign Direct Investment' (1998) 29 *Journal of International Business Studies* 599.

¹⁶⁰ Ibid.

¹⁶¹ Monterrey Consensus paras 21-22.

¹⁶² Monterrey Consensus para 20.

(i) *Liberalisation of trade and investment*

Liberalisation is required for integration into the global economy. In principle, liberalisation refers to an ideal of reduced state involvement in economic affairs, with decisions ultimately determined by the markets.¹⁶³ Applied to trade, it is achieved through mutual obligations towards non-discrimination and the reduction of tariff and non-tariff barriers. In relation to FDI, liberalisation borrows non-discrimination provisions from trade law to effectively restrict state intervention and barriers to FDI flows. It may be achieved under international investment law through commitments to most favoured nation and national treatment provisions, prohibitions against performance requirements, and restrictions on the use of capital controls.

a) *Most favoured nation and national treatment*

Most favoured nation (MFN) treatment requires a contracting party, the host state, to treat foreign investment originating from the other contracting party no less favourably than it would treat investments and investors originating from any third state in the same relationship.¹⁶⁴ This allows investors the benefits of treatment extending beyond the agreement concluded between its home country and an investment destination. An investor can claim the benefits of an agreement between the host state and a third country unless those provisions are expressly excluded from the application of the MFN provision. National treatment (NT) goes a step further by preventing host states from discriminating against foreign investors in relation to domestic investors.

b) *Prohibitions against performance requirements*

Performance requirements (PRs) are a form of discriminatory treatment in which host governments influence the activities of foreign investors by, for instance, requiring companies to export a certain quantity of production, restrict imports, or purchase minimum quantities of local goods and services, to secure benefits for their economies.¹⁶⁵ Performance requirements

¹⁶³ Salacuse & Sullivan op cit note 25 at 90.

¹⁶⁴ Art. 5 International Law Commission, Draft Arts. on Most-Favoured-Nation Clauses, text adopted by the International Law Commission at its 30th session (1978), available at http://untreaty.un.org/ilc/texts/instruments/english/draft%20articles/1_3_1978.pdf.

¹⁶⁵ OECD Performance Requirements (Note by the Chairman) (1996)

run counter to the objectives of investment liberalisation where they are enforced by host states as conditions for market entry and operations and, as such, are prohibited under IIAs.¹⁶⁶

Under TRIMs, member states may not impose measures that are inconsistent with NT and the elimination of export quotas, in relation to goods, as conditions for the establishment of FDI.¹⁶⁷ In addition, an illustrative list of prohibited measures under TRIMs includes local content, trade balancing, import substitution, foreign exchange or export requirements.¹⁶⁸ Under NAFTA PRs are extended to include technology transfer and exclusive supplier requirements.¹⁶⁹

c) Restrictions on capital controls

Restrictions on the use of capital controls contained in IIAs are intended to enable foreign investors to repatriate income and capital, use foreign currency to settle foreign obligations and purchase inputs from abroad.¹⁷⁰

(ii) Promotion and protection of investment

Through provisions relating to promotion and protection, states give effect to the need to limit macroeconomic and political risks. Promotion is, in essence, the promise of protection by capital importing states in exchange for the prospect of capital from exporting states.¹⁷¹ Within the framework of IIAs, and particularly BITs, promotion is a passive form of attracting FDI in which states agree to provide the regulatory conditions required for investors to maximise returns, and to limit their ability to alter those regulations in a manner that might have an adverse effect on the investment.¹⁷² Typical terms of IIAs aimed at protecting investors and their investments, with the goal of promoting FDI, include standards of treatment, protection of intellectual property, prohibitions against expropriation, and dispute settlement mechanisms.

¹⁶⁶ Ibid.

¹⁶⁷ Art. 2:2 TRIMs

¹⁶⁸ Ibid, Annex; Note that under Art. 4 TRIMs, developing states are able to maintain LCRs. They may also maintain trade balancing stipulations and a 100% export requirement in export processing zones as forms of export promotion. Less developed countries with per capital incomes below \$1000 may maintain export subsidies. Subsidies are also allowed for promotions of R&D, regional development, and environmentalism.

¹⁶⁹ Art. 1106:1(f)-(g) North American Free Trade Agreement 1992 32 I.L.M. 289 and 605 ("NAFTA") ; OECD op cit note 165.

¹⁷⁰ Salacuse & Sullivan op cit note 25 at 85.

¹⁷¹ Ibid.

¹⁷² Hallward-Driemeier op cit note 26 at 351; Burke & Epstein op cit note 91 at 36.

a) Standards of treatment

Standards of treatment are found in IIAs and seek to regulate the host state's conduct and behaviour in relation to foreign investors and investment. The most common standard in BITs requires host states to accord Fair and Equitable Treatment (FET) to investors.¹⁷³

The FET standard prohibits manifest arbitrariness in decision making; the denial of justice or due process; discrimination on manifestly wrongful grounds such as race, religion, or gender; abusive treatment such as coercion, duress and harassment; and requires protection of the legitimate expectations of investors which arise from a state's representations, while balancing those expectations against the state's right to regulate in the public interest.¹⁷⁴ The FET standard applies directly to foreign investors and is frequently accompanied by a clause providing that foreign investment shall be afforded treatment that is no less favourable than that required by international law.¹⁷⁵

A further standard requires host states to provide 'Full Protection and Security' for the investment. This standard does not make the host country liable for all injuries that befall an investment but requires states to show due diligence in protecting an investment from harm, by taking "reasonable measures of prevention which a well-administered government could be expected to exercise under similar circumstances."¹⁷⁶

b) Non-discrimination

Bilateral investment treaties typically include general prohibitions against the impairment of management, maintenance, use, enjoyment, or disposal of investment through unreasonable or discriminatory measures.¹⁷⁷ This general non-discrimination provision is often refined in BITs by the inclusion of MFN and NT clauses, and PR restrictions, that apply to investment at the post-establishment phase – after an investment is made. The inclusion of these latter provisions ensures that investors are treated equally relative to local and other foreign investors in the operation, maintenance, and enjoyment of their investments.

¹⁷³ UNCTAD *Fair and Equitable Treatment: A Sequel* (2012); Salacuse & Sullivan op cit note 25 at 83.

¹⁷⁴ UNCTAD op cit note 173.

¹⁷⁵ Salacuse & Sullivan op cit note 25 at 84.

¹⁷⁶ Ibid at 83.

¹⁷⁷ Ibid at 84.

c) Enforcement of intellectual property

The obligation to protect intellectual property, contained in some IIAs, is usually incorporated by reference to the TRIPs agreement under the WTO system.¹⁷⁸ It requires states to adopt minimum protections for intellectual property.

d) Protection against expropriation

One of the primary functions of IIAs is to guard against the expropriation of assets. From an economic perspective, the expropriation risk extinguishes the total value of the investment through nationalisation or confiscation by the state.¹⁷⁹ Where the risk of expropriation is high, a firm is less likely to invest because the period during which it could operate may unexpectedly decrease, providing it with less time to generate profit. If it does invest, despite the risk of expropriation, the firm is likely to underinvest by entering the market too early and abandoning too soon.¹⁸⁰

Aside from the direct seizure of assets, expropriation may manifest indirectly. In the latter case, the legal title to the asset remains vested in the foreign investors, but state action has the effect of encroaching on the ownership rights or diminishing the value of the investment.¹⁸¹ Political risk lies at the core of the indirect expropriation, as state actions typically include cancellation of permits or licences, excessive taxation, the expulsion of the investor or interference with the management of the investment, and effecting changes to exchange controls.¹⁸²

e) Dispute settlement

The ability of an investor to approach a tribunal to secure a binding award against a sovereign state is an innovation unique to international investment law.¹⁸³ Although foreign investors usually have to exhaust local remedies, they have the ability to invoke compulsory

¹⁷⁸ Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C 1994 *WTO* 1869 U.N.T.S. 299 ("TRIPs")

¹⁷⁹ Diana Constanza Restrepo et al 'Expropriation Risk, Investment Decisions and Economic Sectors' (2014) 20.

¹⁸⁰ Ibid.

¹⁸¹ Azwimphleli Langalanga 'Imagining South Africa's Foreign Investment Regulatory Regime in a Global Context' (2015) 10; Butler & Subedi op cit note 38 at 54.

¹⁸² Langalanga op cit note 181 at 10; Butler & Subedi op cit note 38 at 54.

¹⁸³ Yannick Radi 'The Application of the Most-Favoured-Nation Clause to the Dispute Settlement Provisions of Bilateral Investment Treaties: Domesticating the "Trojan Horse"' (2007) 18 *European Journal of International Law* 763; Salacuse & Sullivan op cit note 25 at 88.

arbitration under Investor-State Dispute Settlement (ISDS) systems. This is usually achieved through the International Centre for the Settlement of Investment Disputes (ICSID) or the UN Centre for International Trade Law.

The ISDS system is the preferred mechanism for dispute settlement provided in nearly all IIAs in operation.¹⁸⁴ The system evolved from the assumption that judicial systems in developing countries are less developed and impartial.¹⁸⁵ As such, the incorporation of the ISDS system within IIAs serves to reduce political risk by protecting investors against perceived bias within host states.

VI. LEGAL IMPASSE: BARRIERS TO DEVELOPMENT AND MITIGATING INEQUALITY

The legal provisions contained within IIAs and the WTO system give effect to a policy framework that seeks to minimise investment risk, ensure unrestrained capital flows, and promote a competitive international environment. These aims are developed in response to the needs of investors, and the legal framework is largely successful at achieving them. The effect is the establishment of a competitive environment and restrictions on policy space that can impact a state's developmental objectives.

(a) Generating competition through international investment law

By liberalising trade and capital markets, international law gives rise to competition between states for FDI and, if the state has been successful at attracting it, between domestic and multinational firms. This competition is a consequence of non-discrimination through the operation of NT, MFN treatment, prohibitions against PRs, and FET, which limit the criteria and barriers states may impose on investors and their investments. As this paper argues, competition between states and firms establishes conditions that result in the closure of domestic firms due to deindustrialisation and relative inefficiencies and can support skills biased technological change.

(i) Post-establishment competition and reverse discrimination

By committing to treat investors equally, the inclusion of NT and PR provisions in BITs levels the playing field between domestic and foreign firms. While competition is not

¹⁸⁴ Butler & Subedi op cit note 38 at 47.

¹⁸⁵ Langalanga op cit note 181 at 11.

inherently harmful, and can support economic growth and convergence, coercive and unfair competition between firms can lead to the contraction of the domestic industry.

In a competitive environment, the imbalances in production capabilities between firms in developing states and multinationals from advanced nations are likely to exacerbate those conditions that drive inequality. This is particularly the case in the renewable energy sector where dominant multinationals are likely far more productive than domestic firms.

Moreover, a consequence of NT is that domestic investors may be disadvantaged as foreign investors receive equal treatment under municipal law, but the benefits granted to foreign firms under IIAs are not reciprocated. As a result, NT provisions may lead to reverse discrimination against domestic investors, where investment protections available to foreign investors are more favourable.¹⁸⁶

The FET standard, for instance, is not available to domestic investors, nor is the ability to access ISDS mechanisms. Moreover, PRs in IIAs are prohibited against foreign investors, irrespective of whether they are applied to domestic firms.¹⁸⁷ Where restrictions on PRs are not equally applied to multinationals, they disadvantage domestic firms through production losses and inefficiencies under circumstances in which domestic firms are already less competitive.

Similarly, the inability of domestic firms to access international dispute settlement tribunals theoretically increases political risks relative to their multinational competitors. The resultant negative effect on capital costs could exacerbate the challenges domestic firms face in raising capital relative to multinationals.

Notwithstanding their relatively unfavourable position, the extent of competition for domestic firms may be inadvertently widened through BITs. Although BITs are entered into between two state parties, the inclusion of an MFN clause has the effect of creating multilateral arrangements as firms from a state that has included an MFN clause can benefit from more preferential terms outside of the agreement with its home state.¹⁸⁸ As a result, competition may be extended to firms beyond those in which the host state initially intended – including advanced states in which industries are more developed and firms are significantly more efficient.

¹⁸⁶ Butler & Subedi op cit note 38 at 49.

¹⁸⁷ OECD op cit note 165 at 3.

¹⁸⁸ Radi op cit note 183 at 773.

(ii) *Pre-establishment competition*

Non-discrimination measures are traditionally incorporated in BITs to protect investors interests after their investments are made – at the post-establishment phase. Beginning with NAFTA in 1994, capital-exporting countries – the US in particular – sought to achieve higher investment and market liberalisation concessions in IIA negotiations with capital importing states. This expanded non-discrimination measures in some IIAs to include the prohibition of pre-establishment conditions for permitting FDI, as non-discrimination applied to the “establishment, acquisition, and expansion” of an investment.¹⁸⁹

The inclusion of anti-discrimination provisions in IIAs at the pre-establishment phase restricts a host state’s ability to prefer FDI from a particular state, and investment from its own nationals, for political or strategic reasons. National treatment requirements prohibit states from preferring investment from local firms over multinationals. Performance requirement restrictions, in this context, prevent states from imposing conditions for access to the market, such as licensing conditions or requirements that the investor commits to using local low-skill labour.

Including these provisions significantly opens up markets to multinational competitors. They limit states’ ability to impose conditions on the entry of investment that could otherwise improve the competitive abilities of domestic firms or minimise the adverse effects of competition on labour markets.

(b) *Policy space limitations under international investment law*

Since the purpose of an IIA is to limit a state’s ability to effect adverse policy changes, these agreements necessarily limit domestic policy space.¹⁹⁰ However, beyond attracting FDI, the benefits of foregoing policy sovereignty in favour of conventional policies championed by the Monterrey Consensus are limited. Relative to police choices that have a destructive effect on markets or deliberately heighten investment risks, there is little evidence to show that conventional policy choices reliably generate high growth.¹⁹¹

International laws that give effect to conventional policies do not allow for states to deploy crucial domestic policy tools that could be used to facilitate structural change – change

¹⁸⁹ Art. 1106:1 NAFTA.

¹⁹⁰ Burke & Epstein op cit note 87 at 35.

¹⁹¹ Rodrik op cit note 11 at 21.

necessary to pull labour surpluses into the formal economy by developing a competitive local industry.

One means for achieving this structural change is to harness the tools of industrial policy. Soft industrial policy options such as export promotion, trade credit, the use of standards, special economic zones (SEZs), and the construction of infrastructure to support investment, are generally permitted under conventional international policy. However, many tools of hard industrial policy are prohibited or restricted under international investment law.¹⁹² These include tariffs, discriminatory tax breaks, production and export subsidies, subsidised credit programmes, local content requirements (LCRs), quantitative restrictions, or minimum export requirements.

This paper has suggested domestic policy outcomes that could limit the effect of inequality generated by competition when attracting sustainable FDI in renewable energy. However, restricting the use of hard industrial policy under international investment law limits the tools available to states to realise those outcomes. These aspects are examined in turn with reference to each of the policy recommendations.

(i) Restricting the ability to prefer and prioritise investments from certain countries or industries

The principle of protection and promotion in IIAs emphasises a hands-off approach for the state when seeking FDI. Essentially, the state's role is to provide attractive conditions and limit market and political risks while opening the market to the possibility that firms seek opportunities. This ultimately leaves the decision of whether and where to invest in the hands of the investor.

There is, however, increasing support at the international level for greater state involvement in investment promotion. At the multinational level, the Action Agenda urges states to actively encourage investment promotion and incentivise FDI to developing countries.¹⁹³ The Agenda reinforces the need to promote projects with the most significant potential for full and productive employment, structural transformation, sustainable industries, and diversification.¹⁹⁴

¹⁹² For example TRIMS which, in relation to goods, prohibits local content, trade balancing, import substitution, foreign exchange or export requirements and measures inconsistent with NT.

¹⁹³ Action Agenda para 45.

¹⁹⁴ Ibid para 45.

Within this paradigm, states might utilise investment promotion agencies to actively encourage investment into particular activities. Roadshows and high-level geopolitical engagement could draw attention to the opportunities for investment within a particular country. Outside of these examples, it is less clear that the Action Agenda encourages states to utilise domestic policy to bring about structural change nor restrict investments to protect domestic industries.

Under current international laws, states are unable to utilise key tools of industrial policy to establish a more attractive investment destination by improving market conditions. They may also not use certain industrial policy tools to mitigate the impacts of competition. However, if industrial support policies were incorporated, policy options would be much wider. Integration into the world economy could be achieved conventionally through free trade or accomplished through export subsidies, export processing zones or SEZs. Promoting investment in domestic industry could be achieved by reducing barriers to entry and reducing the costs of doing business, as well as through subsidised credit, tax incentives, or trade protection.¹⁹⁵ Instruments of industrial policy could potentially bring about the structural and market changes necessary to develop comparative advantage within manufacturing activities, in order to attract gateway activities within escalator industries.

Currently, states might utilise soft industrial policy measures, such as SEZs or tax breaks, to lower the fixed costs associated with setting up and operating subsidiaries. Utilising soft industrial policy tools in this way could give effect to the need to incentivise investment as outlined in the Action Agenda. However, it is recommended that the use of soft policy tools is tied to the use of PRs – hard industrial policy tools – to support the development of local productive capacity by encouraging the use of local labour and industry. For example, the use of SEZs and associated tax breaks might be tied to the fulfilment of local content requirements.

Furthermore, non-discrimination measures requiring equal treatment of domestic and foreign firms on entry not only encourage competition but may restrict states' ability to prioritise or limit investments from particular firms or states. It is, however, important to note that where MFN and NT provisions for market entry are included in IIAs, they are usually subject to tailored lists of exclusions.¹⁹⁶ For instance, under GATS, NT provisions only apply

¹⁹⁵ Rodrik op cit note 11 at 35.

¹⁹⁶ Radi op cit note 183 at 773.

to those sectors to which a state commits under its schedule, allowing for more policy space in service-related FDI in sectors which are not committed.¹⁹⁷ Bilateral investment treaties frequently state that host countries admit investment in accordance with their own laws.¹⁹⁸ The key is, therefore, for states to utilise exceptions within agreements where available, and to include exceptions within agreements for policies aimed at realising sustainable development.

(ii) Restricting the use of hard policy tools to develop local productive capacity

To develop local productive capacity in alignment with sustainable development objectives, the Action Agenda recognises that government policies should strengthen positive spill-overs from know-how and technology by encouraging linkages with domestic suppliers and the integration of local enterprises into GVCs. It reinforces the view that developing local capacity involves a process of learning and innovation, and establishing demand that supports domestic industries.¹⁹⁹ Although not mentioned in the Action Agenda, this process, which could be viewed as one of development and accumulation of production capabilities, is probably best achieved through industrial policy.²⁰⁰

By utilising industrial policy, states could generate capacity by supporting demand for domestic inputs and protecting infant industries against competition from foreign producers. Local content requirements, for example, ensure that investors make use of domestic manufacturers, components, suppliers, and labour in their operations.²⁰¹ If used effectively, they could generate returns to scale, close technological gaps, and establish comparative advantage within domestic industries. A similar policy option would be to use government procurement as a tool to give preferential treatment to domestic manufacturers. Indeed, encouraging the use of local content and government procurement to support local

States have, for instance, restricted, limited, or imposed conditions on the ability of foreigners to invest in sectors that can affect national security, while some may restrict foreign ownership of real estate. Most states have policies in place to regulate the entry of foreign capital.

¹⁹⁷ GATS Art. XVII:1.

¹⁹⁸ Salacuse & Sullivan op cit note 25 at 91.

¹⁹⁹ Rodrik op cit note 11 at 35; Chang & Andreoni op cit note 140 at 328; Bowen & Kuralbayeva op cit note 68 at 10.

²⁰⁰ Chang & Andreoni op cit note 140 at 229.

²⁰¹ Art. 1(a) TRIMs, Annex defines LCRs as measures which require “the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production”

manufacturers have played an essential role in the development of renewable technologies in several countries.²⁰²

Despite this, the prohibition against LCRs under TRIMs has, in particular, limited the industrial policy options available to emerging markets within the renewable energy sector.

In the matter of *India - Solar Cells*,²⁰³ the US was successful in a claim against India brought before the WTO's Dispute Settlement Unit (DSU) under Article 2.1 of the TRIMs Agreement and III:4 of GATT for the use of LCRs. The LCRs, in support of India's Jawaharlal Nehru National Solar Mission, required solar power developers selling electricity to the government to procure cells and modules manufactured domestically. The Indian government's LCRs were put in place with the purpose of ensuring sustainable development and the attainment of energy security. They also aligned with the country's long-standing goals of promoting domestic manufacturing.²⁰⁴ The LCRs were phased in over three batches which presumably allowed Indian manufacturers to increase their capacity over time supported by the imposition of more restrictive LCRs.²⁰⁵ The phased policy would have supported technological upgrading and convergence of India's solar cell manufacturing industry – a policy objective reflected in the National Solar Mission's stated objective to “establish India as a global leader in solar energy.” Nevertheless, such a move threatened to reduce imports of thin-film technologies which represented a majority of US solar exports to India, ultimately leading to the dispute and India conceding to end the use of PRs.²⁰⁶

The *India - Solar Cells* matter is one of a growing number of WTO disputes in the renewable energy sector.²⁰⁷ Among the more recent cases is a tit-for-tat dispute subsequently brought by India against the US before the WTO, in which it successfully exposed the US' own use of LCRs in the renewable energy industry.²⁰⁸ These cases highlight the tensions between international economic laws, climate change policies, and renewable energy

²⁰² Chang & Andreoni op cit note 140 at 328; OECD op cit note 74 at 52.

²⁰³ *India - Certain Measures Relating to Solar Cells and Solar Modules* 2016 WT/DS456/R (WTO Dispute Panel). ("India-Solar Cells")

²⁰⁴ Marianna Karttunen & Michael O. Moore *India – Solar Cells: Trade Rules, Climate Policy, and Sustainable Development Goals* (2017) 1.

²⁰⁵ *India - Solar Cells*; Karttunen & Moore op cit note 204 at 3.

²⁰⁶ Karttunen & Moore op cit note 204 at 3.

²⁰⁷ OECD op cit note 74 at 54.

²⁰⁸ *United States — Certain Measures Relating to the Renewable Energy Sector* 2019 WT/DS510/R (WTO DSU).

initiatives. More pertinently, they highlight the inability of states to utilise policies that expand domestic manufacturing capabilities for the purposes of development.

It is important to note that, as with all industrial policy, the use of LCRs creates inefficiencies in the market that can raise fixed costs or production costs at the level of the firm.²⁰⁹ As such, an OECD report on Overcoming Barriers to International Investment in Clean Energy highlights that LCRs hamper international trade and reduce competitive pressures on domestic manufactures to lower costs, which might slow the development of the global renewable energy industry.²¹⁰ Instead, the report suggests that policymakers assess potential beyond the manufacturing segment of renewable energy value chains, noting that downstream activities in project development, installation, operations, and maintenance could provide considerable scope for employment.²¹¹

The trouble with such an approach, based on the analysis above, is that it would fail to significantly reduce inequality in developing economies and could exacerbate it. Despite the adverse recommendation, the OECD report notes that LCR policies can be effective at achieving their objectives under certain conditions such as sufficient market size and where there is local technical expertise.²¹² This finding reinforces the need to open up to regional markets by utilising RTAs, and to ensure the transfer of skills.

Developing local productive capacity and technical expertise requires a transfer of skills to local workers. Conventional policy emphasises the protection of intellectual property and investment in research and development (R&D) to ensure the spill-over of technology and know-how.²¹³ However, asserting intellectual property rights in IIAs runs the risk of stifling a host state's ability to develop domestic technological capabilities from licenced technologies, thus limiting domestic firms' ability to upgrade. Moreover, rent-seeking, through exorbitant profits from royalties, contributes little to societal welfare. However, host states may be unwilling to enact policies to enforce rent reductions or compulsory licensing which may amount to expropriation or lead to dispute settlement proceedings.

²⁰⁹ OECD op cit note 74 at 72.

²¹⁰ Ibid at 64.

²¹¹ Ibid.

²¹² Ibid at 65.

²¹³ Trade and Development Board op cit note 13.

On the other hand, learning and innovation may be better achieved through participation in production, especially where the ability to manufacture a product is the most crucial step in the innovation chain.²¹⁴

Empirical evidence of successful Asian industrialisation shows that industrial policy is most successful where the policies that drive domestic demand and encourage firms to increase productive output are combined with measures to help acquire skills and know-how, and support innovation.²¹⁵ Protection of intellectual property remains vital to encourage technology flows, but should only be protected to the extent necessary. It must be possible to transfer skills to the domestic workforce through intellectual property licensing and use, as well as learning-from-doing through cooperation with local companies.

(iii) Restricting the use of targeted policies to mitigate the effect of inequality

Finally, NT and FET obligations may prevent a state from realising legitimate policy objectives to address inequality that invariably arises. This is the result of uncertainty as to when discrimination in favour of national investors is considered just and fair. As such, measures that states take to support domestic investors within certain sectors, or within segments of a population group, could violate NT obligations. Moreover, through FET standards, and prohibitions against indirect expropriation, states may be unable to correct the adverse effects of FDI on inequality by way of policy implemented after an investment is made.

By committing to liberalisation under IIAs, states limit their capacity to change course towards a more inward-focused domestic policy.²¹⁶ This lack of policy space is most evident in states' unwillingness to make any retrospective policy changes that could affect the investment due to potential violations of standards of treatment, and in fear of arbitration through the ISDS system. Consequently, once an industry is opened to FDI, domestic firms are left to the mercies of the market unless more restrictive rules are applied to all firms – both foreign and national – at the outset.

In the matter of *Foresti v South Africa*, the claimants, Italian nationals, brought a claim for expropriation before the ICSID.²¹⁷ The claim arose out of an amendment to South Africa's

²¹⁴ Chang & Andreoni op cit note 140 at 331.

²¹⁵ Ibid at 332.

²¹⁶ Mayer op cit note 145 at 4.

²¹⁷ *Foresti, Carli and others v South Africa* 2010 ICSID Case No. ARB(AF)/07/1).

Minerals and Petroleum Resources Development Act (MPRDA)²¹⁸ which came into effect on 1 May 2004 and the promulgation of a Mining Charter encouraging greater ownership of mining assets by historically disadvantaged South Africans. These Black Economic Empowerment (BEE) policies required mining companies to achieve 26 per cent ownership of mining assets by historically disadvantaged population groups within a decade.²¹⁹

Action was instituted against the South African government pursuant to two BITs entered with Luxembourg and Italy respectively.²²⁰ The claimants alleged that the MPRDA and Mining Charter introduced compulsory equity divestiture requirements which constituted a breach of the procedural requirements for expropriation (including failure to pay adequate compensation, lack of due process, and discrimination).²²¹ South Africa argued that the MPRDA and Mining Charter were promulgated for the purposes of, among other things, protecting the environment and communities living in the vicinity of mining operations, and ameliorating the disenfranchisement of historically disadvantaged persons and other negative social effects caused by Apartheid and mining legislation passed during that period.²²²

Within South Africa, the legacy of Apartheid includes stubbornly high levels of inequality driven by unemployment and surplus labour.²²³ As previously noted, skills-biased technological change and persistently high unemployment due to deindustrialisation, have contributed to South Africa's high rate of inequality. This inequality is structurally entrenched along racial lines.²²⁴ Low-skill workers are predominantly poor and black. On the other hand, white South Africans are significantly more educated, skilled, and employed within the tertiary sector.²²⁵ In other words, an increase in informality primarily affects black South Africans, while skills-biased technological change generally benefits whites. BEE policies aim to empower black South Africans by ensuring their increased participation in the formal and more advanced sectors of the economy. It may be argued that the successful implementation of these

²¹⁸ Minerals and Petroleum Resources Development Act 28 of 2002.

²¹⁹ *Foresti v South Africa* para 56.

²²⁰ *Ibid* para 1.

²²¹ *Ibid* paras 57-66.

²²² *Ibid* para 69.

²²³ Maluleke *op cit* note 103 at 10.

²²⁴ See generally: Maluleke *op cit* note 103, which shows evidence of inequality linked to race across on all dimensions measured.

²²⁵ Maluleke *op cit* note 103 at 6; Bond *op cit* note 98 at 578.

policies holds the potential to reduce inequality by using race as a proxy for poverty, low-human capital, and disadvantage.

Returning to the case, the claimants alleged that the MPRDA and Mining Charter breached the respondent's FET and NT agreements under the BITs.²²⁶ The South African government argued that the divestment requirements treated all investors, whether domestic or foreign, in the same way.²²⁷ In the end, South Africa granted the claimants new mineral rights without requiring them to sell their shares to historically disadvantaged persons, and the matter was discontinued.²²⁸

Despite discontinuance, the matter remains controversial. If the claimants were successful, international investment law would have restricted South Africa's ability to adopt affirmative action policies in relation to foreign investors only – superseding a Constitutional imperative to promote the advancement of disadvantage groups.²²⁹ It could have had a direct impact on South Africa's ability to mitigate inequality through FDI and, by favouring multinationals over domestic firms, could have exacerbated it. In the end, South Africa terminated all of its BITs, including those with Luxembourg and Italy. It replaced them with municipal law in the form of the Protection of Investment Act.²³⁰

VII. CONCLUSION

FDI has the capacity to generate growth and reduce the income gap that separates wealthy states from developing nations. However, its national distributional effects remain low. International laws designed to support economic growth, through increased investment flows, are informed by policies aimed at meeting the needs of investors.

Through the liberalisation of trade and investment, international investment laws establish competition between firms that encourage efficiencies in production that could support convergence. In addition, increased competition between states for FDI is theorised to

²²⁶ *Foresti v South Africa* para 78.

²²⁷ *Ibid* para 72.

²²⁸ *Ibid* para 79.

²²⁹ Annalisa M. Leibold 'The Friction Between Investor Protection and Human Rights: Lessons from *Foresti v South Africa*' (2015) *Houston Journal of International Law, Forthcoming* 30.

²³⁰ Act 22 of 2015.

facilitating a rise to the top in positive market-based reforms. Despite this, through its effects on labour markets, a consequence of increased competition is rising income inequality.

Nonetheless, FDI remains a vital source of capital for development and the realisation of SDGs. Within the contemporary context of falling FDI flows, increased protectionism, and the transformation of global production systems, sustainable FDI offers a solution for developing states. It could support the development of sustainable infrastructure and industries, reduce inequality, and achieve development. This is notably important as the shifting global economic climate could, on its own, perpetuate inequality. Deindustrialisation within high carbon-emitting sectors, as well as the transformation of global production systems, could encourage job losses that increase wage gaps in developing states.

If sustainable FDI is to mitigate the impacts of widening wage gaps, it must be able to generate growth, absorb surplus labour, and avoid perpetuating inequality. However, if the renewable energy sector is illustrative of sustainable investment, the prognosis is concerning. Although several UN agencies and international bodies argue that investment in renewables could support economic development and generate jobs, the reality is that it might be ineffective at reducing inequality over the long run. It may, in fact, worsen it.

At one end of the labour market, competition from far more productive multinationals threatens domestic firms, driving down wages and potentially inducing job losses and increases in surplus labour. On the other end, the capital-intensive nature of the sector leads to demand for skilled workers, thus supporting skills-biased technological change.

The most labour-intensive segments of renewable energy value chains require low-skill workers for limited periods. As the theory of perfect factor mobility does not operate as expected within the context of developing economies, the ability of renewable energy to absorb surplus labour is limited. A solution is to encourage investment within escalator activities – manufacturing and assembly of wind and solar PV components – and to develop local capacity by supporting demand and skills transfers. However, competition from larger multinationals limits the growth potential of infant industries where developing states manage to get a toe-hold in these activities.

To enter renewable energy value chains and upgrade in a manner that reduces inequality, states should harness domestic policy to achieve three outcomes. First, attract investment within escalator industries while reasonably limiting imports and investment from highly efficient competitors. Secondly, develop local productive capacity by encouraging exports and

using industrial support policies to generate demand and facilitate the transfer of skills. Thirdly, put measures in place to mitigate inequality that may invariably arise.

However, under prevailing IIAs and WTO rules, states have limited domestic policy tools at their disposal. The rules of international investment law, designed to protect investment in the interest of investors, limit the policy options available to states to realise these developmental outcomes and, instead, perpetuate inequality-inducing competition.

Rising inequality may be viewed as feedback – an output of conventional investment policymaking that prevailing international investment law fails to take into account. If sustainable FDI is to avoid perpetuating inequality, legal reform is needed. When negotiating reforms, policymakers in developing states must emphasise the need to limit competition and increase the domestic policy space required for realising sustainable development that simultaneously reduces inequality. The considerations of this paper might inform that debate.

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