



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cpce20

# The Impact of Recentralisation on FDI: Evidence from a Quasi-Natural Experiment

Hiep Ngoc Luu, Minh Ngoc Nguyen & Hieu Thanh Nguyen

**To cite this article:** Hiep Ngoc Luu, Minh Ngoc Nguyen & Hieu Thanh Nguyen (2022) The Impact of Recentralisation on FDI: Evidence from a Quasi-Natural Experiment, Post-Communist Economies, 34:4, 543-563, DOI: <u>10.1080/14631377.2022.2029252</u>

To link to this article: <u>https://doi.org/10.1080/14631377.2022.2029252</u>

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



0

Published online: 24 Feb 2022.

Submit your article to this journal  $\square$ 

Article views: 4893



View related articles 🗹

🕨 View Crossmark data 🗹

Routledae Taylor & Francis Group

OPEN ACCESS Check for updates

# The Impact of Recentralisation on FDI: Evidence from a **Quasi-Natural Experiment**

Hiep Ngoc Luu<sup>a,b,c</sup>, Minh Ngoc Nguyen<sup>c,d</sup> and Hieu Thanh Nguyen<sup>e</sup>

<sup>a</sup>University of St Andrews, St Andrews, UK; <sup>b</sup>VNU University of Economics and Business, Hanoi, Vietnam; <sup>c</sup>Institute of Economics and Business Research, Hanoi, Vietnam; <sup>d</sup>James Cook University, Townsville, Australia; eNational Economics University, Hanoi, Vietnam

## ABSTRACT

Although decentralised governance has been one of the most salient political regimes worldwide over the past few decades, many countries have started to realise various shortcomings associated with their decentralisation process. As a consequence, a number of central governments have attempted to pursue recentralisation reforms in order to reclaim authority from the localities. This government reform can lead to significant changes in institutional arrangements, and subsequently, may influence various aspects of socio-economic activities. However, the real impact of recentralisation reform still remains ambiguous. In this paper, we examine how recentralisation may affect foreign direct investment (FDI) inflows. We exploit the pilot recentralisation reform that temporarily abolished the intermediate legislative branches in some provinces in Vietnam as a quasi-natural experiment. The result shows that recentralisation leads to a significant reduction in FDI inflows. Our results are robust to a number of sensitivity analyses and falsification tests. Overall, our findings contribute to the literature on the determinants of FDI and provide new evidence on the real effect of recentralisation reform.

#### **ARTICLE HISTORY**

Received 6 December 2020 Accepted 16 December 2021

### **KEYWORDS**

Recentralisation; FDI; difference-in-difference: Vietnam

## 1. Introduction

Over the past few decades, decentralisation has been widely perceived as a remedy to improve democracy, policy innovation, public services provisions and government efficiency (Balme & Qi, 2014; Eaton, 2001; Green, 2015; Jin et al., 2005). However, economists have started casting doubt over the real impact of decentralisation and contend that the benefits of decentralisation may not be realised in practice (Falleti, 2010; O'Neill, 2003). Against this backdrop, many countries in Latin America, Africa, Western Europe and Asia have pursued recentralisation reforms in order to reverse the decentralisation process and strengthen central control (Eaton, 2014; Green, 2015; Kostka & Nahm, 2017).

In principle, recentralisation is an important government decision. It involves the transfer of public power from lower to higher levels of government hierarchy (Dickovick, 2011; Eaton, 2014; Wunsch, 2001). In that way, recentralisation could be beneficial for the society and economy as it helps to enhance local government

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/ by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

CONTACT Hiep Ngoc Luu A hiepIn@vnu.edu.vn D VNU University of Economics and Business, Vietnam National University, Hanoi, Vietnam

<sup>© 2022</sup> The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

544 👄 H. N. LUU ET AL.

inefficiency, simplify bureaucratic procedures and avoid overlapping in administrative functions (Treisman, 2007). However, opponents of recentralisation emphasise that it may exert negative consequences on an economy because it could limit citizen participation in policymaking (Malesky et al., 2014) and cause a lack of transparency in the business environment due to the disruption of the flow of information from central government to local citizens (Crook & Manor, 2018).

Arguably, recentralisation reform could lead to significant changes in the socialeconomic environment, and thus may exert pervasive impacts on various aspects of economic activities (Eaton, 2014; Kostka & Nahm, 2017; Lewis, 2014). Among those economic activities, FDI has always been attracting the attention of policy makers, particularly in developing countries where FDI constitutes a stable capital inflow which enhances growth and development (Vo, 2018). Research shows that foreign investors analyse the cost-benefit trade-off associated with various aspects of the host countries' institutional and social-economic respective environments when making their investment decisions (Aziz, 2018). In line with this proposition, it is feasible to expect that recentralisation could exert a significant impact on the investment incentive of foreign investors, and thus influence the level of FDI inflows. Surprisingly, neither theory nor empirical work provides a univocal understanding of this nexus. In this paper, we attempt to close this gap and investigate to what extent recentralisation actually affects FDI inflows.

We begin by postulating that recentralisation could foster the investment incentive of foreign investors. Research shows that recentralisation can help to truncate unnecessary levels and units in the government structure. This could subsequently shorten bureaucratic procedure (Kuswanto et al., 2016) and mitigate the issue of overregulation and overlapping administrative functions (Kostka & Nahm, 2017). Such improvements in government quality could reduce the administrative costs of foreign investors, thereby facilitating their investment incentives (Meyer et al., 2009). Furthermore, recentralisation can strengthen the monitoring capability of the higher levels of governing bodies, putting them in a stronger position to reward and discipline lower administrations (Blanchard & Shleifer, 2001). Given that FDI is often perceived as a major priority in the development strategy of central government in developing countries (Du et al., 2008), recentralisation reform could induce local authorities to engage more actively in the race to attract further FDI.

On the other hand, there are several reasons for expecting that recentralisation can make the market less attractive to foreign investors, leading to lower FDI inflows. First, in relation to the central authorities, local governments often have a better understanding of local development trajectories, strengths and weaknesses (Bardhan, 2002). This makes policies can be tailored in the way that fits the unique features and specific needs of the locality (Stansel, 2005). In this regard, the transfer of public power and responsibility from lower to higher levels of government could lead to a lack of local specific knowledge when designing policies for attracting FDI. Second, there has been evidence that foreign investors can pay bribes to attain favourable policy incentives and win government contracts (Goodspeed et al., 2011; Lui, 1985; Luu et al., 2019). Thus, when the power of local government is retained by central government, the opportunities for foreign firms to exploit such advantages are limited. This could reduce the investment incentive of foreign investors, and therefore lower the levels of FDI inflow. Finally, recentralisation could also lead to information asymmetry and significantly accelerate the cost of obtaining and

processing information (Kessy & McCourt, 2013). Earlier studies suggest that local governments can serve as a bridge between central authorities and citizens so that individuals and businesses are kept more informed of regulations and the local government activities (Crook and Manor (2018); Regmi et al. (2010)). In the absence of such a bridge due to recentralisation, investors would be exposed to the problem of information asymmetry, meaning that it is costlier for them to obtain the necessary information to do their business. Collectively, recentralisation can make foreign investors reluctant to invest and thereby reduce FDI inflows.

Existing theories provide conflicting propositions on how recentralisation may affect FDI. Empirically, identifying the causal impact of recentralisation on FDI is also a challenge for at least two reasons: i) endogeneity of recentralisation, and ii) difficulties in measuring recentralisation. Similar to most of the empirical economic studies, endogeneity remains as the barrier for a causal relationship interpretation. Arguably, the central government's decision to reclaim the authority from localities can hardly be random. Research shows that recentralisation reform is likely to be endogenous with various factors, such as economic condition, ideology and party politics (Muro, 2015). In addition, it is a possibility that the central government's decision to promulgate a recentralisation reform may be driven by the level of FDI inflows, not otherwise. Specifically, the low level of FDI inflow could trigger the pressure for the host country's authorities to improve institutional quality through recentralisation reform. Thus, any attempt that simply regresses FDI on recentralisation may yield a spurious conclusion about the causal relationship. With regard to the second problem, recentralisation is difficult to quantify, and measurement error can affect results further. In practice, a recentralisation reform is often implemented systematically, affecting all administrative units within a particular country. Therefore, this makes it is very difficult to tease out the effects of recentralisation on FDI from that of other socio-economic policies and unobserved time-variant factors that might take place simultaneously and exert similar outcome effects.

To overcome these challenges, we adopt a method which is similar in spirit to that of Malesky et al. (2014) and use a quasi-natural experiment to examine how FDI inflows respond to a shock in administrative recentralisation reform. We rely on a difference-indifference (DiD) estimator to analyse how FDI inflows are evolved in jurisdictions which are being affected by a recentralisation reform in relation to those jurisdictions that do not experience such changes between the period prior to, and after, the recentralisation reform. Thus, this setting allows us to evaluate what would happen to FDI inflows if the recentralisation reform has never been taken in place, i.e. the true counterfactual.

We take Vietnam as a laboratory to investigate the impact of recentralisation reform on FDI. Vietnam provides an ideal and somewhat unique arena to test the recentralisation-FDI relationship for a number of reasons. First, the recentralisation reform in Vietnam took place in 2009 with a pilot scope of ten provinces. Under the pilot recentralisation reform, the intermediate legislative units of pilot provinces are removed, and their function is transferred to higher level executive units. Such a pilot implementation constitutes a rare shock in our DiD analysis to compare the FDI inflow levels between the affected provinces (i.e. those parts of the pilot recentralisation reform) and the unaffected provinces over the period before and after the recentralisation reform. Arguably, the DiD approach allows us to obtain a more creditable result of the recentralisation-FDI nexus. Second, Vietnam is among the fastest growing countries in Southeast Asia (Asian Development Bank, 2019),

and FDI is one of the major factors that contributes to the nation growth and development (Anwar & Nguyen, 2010; Dang, 2013). Therefore, attracting FDI is one of the highest priorities among Vietnamese policy makers. In this regard, examining how political transfer of power within a government hierarchy affects the provincial attractiveness to FDI in Vietnam is an empirical question of crucial importance.

Using data from sixty-three provinces in Vietnam over a ten-year period from 2005 to 2014, we find that the recentralisation reform leads to a reduction in FDI inflow. This result is robust to a number of model specifications, period of study and sampling methods. We are also able to rule out the potential explanation for our results that an omitted variable coinciding with the pilot recentralisation reform could have been the underlying cause for the decline in FDI. We do so by conducting two placebo tests. First, we falsely assume that the recentralisation reform was enacted in 2007, two years prior to the actual event in 2009. Second, we randomly selected ten provinces from the control group (i.e. those which have never experienced a recentralisation reform) to form the artificially affected group. We apply the same DiD setting in these two falsification tests. Arguably, if an unobservable shock did happen around the same time that the pilot recentralisation reform took place in 2009, it should still reside in the testing framework, and would therefore affect the results. Nevertheless, if no such shock occurred, then our falsely assigned recentralisation year and falsely assigned recentralisation group should exert no impact on FDI when we re-estimate the baseline model. In fact, we find that these falsely assigned recentralisation events have no impact on FDI. These results provide support to the validity of our DiD approach and reaffirm that our results are not affected by any omitted variables. Overall, our finding supports the proposition that recentralisation can deter the investment climate for foreign investors by causing a lack of local preferences in policy making, limiting opportunities for foreign investors to influence local governments to gain competitive advantages, and thus reduce the transparency of the local business environment.

This paper makes several important contributions. First, we contribute to a large strand of literature examining the determinants of FDI. This literature documents that macroeconomic conditions such as economic growth (Choong & Lam, 2010), market size (Kang & Jiang, 2012), trade openness (Ang, 2008), human capital (Mina, 2007) and infrastructure level (Asiedu, 2006) can influence the level of FDI inflows into the host economy. Another strand of literature focuses on the role of institutional quality in determining a location's attractiveness to FDI (Demirbag et al., 2010; Du et al., 2008; Kamal et al., 2020). It is suggested that, by determining the transaction costs and the opportunity of exploiting local resources of multinational enterprises (MNEs), institutions can influence both the types (He et al., 2013; Henisz, 2000; Meyer et al., 2009; Yiu & Makino, 2002), as well as the levels of FDI inflow (Du et al., 2012; Godinez & Liu, 2015). This paper adds to this line of research by showing how government restructuring can determine the local attractive-ness to FDI.

Second, we contribute to the emerging strand of literature evaluating the real impact of government recentralisation. Limited efforts have been made to evaluate how recentralisation may affect environmental governance (Kostka & Nahm, 2017; Wunsch, 2001), health policy (Saltman, 2008), welfare regimes (Zhu & Zhao, 2018) and public service provisions (Malesky et al., 2014). We corroborate this strand of research by providing the first empirical assessment on the impact of recentralisation on FDI inflow.

Finally, by exploiting the pilot removal of the intermediate legislative units in Vietnam as a shock in a quasi-natural experiment, we provide an important timely policy implication on the cost-benefit trade-off of the pilot recentralisation programme in Vietnam. Even though the program officially ended in 2016, there is still a lack of quantitative assessment of the effectiveness and economic impact of the pilot recentralisation reform. It is still unclear as to whether the recentralisation reform should be implemented in a systematic manner. Five years after the pilot program, the ambiguity of outcomes has urged the central government to conduct another recentralisation experiment one more time. Effectively from July 2021, the low-level legislative units in the two largest centrallyrun cities Hanoi<sup>1</sup> and Ho Chi Minh City<sup>2</sup> will be temporarily removed and no further elections shall be held. This suggests that rigorous investigations on the impacts of recentralisation reform are crucial for guiding policies in the next period. Thus, by showing that recentralisation can lead to an undesirable outcome in terms of discouraging the investment incentives of foreign investors, our paper suggests that policy makers should design and implement such a recentralisation reform with caution. The analysis provided in this paper allows policy makers to become more aware of the costs and benefits of recentralisation, so that the reform can be implemented more efficiently, which can later result in more desirable economic outcomes.

The rest of the paper proceeds as follows: section 2 discusses the institutional background. Section 3 introduces model specifications and data. Section 4 presents the empirical results. Section 5 provides some additional analyses and section 6 concludes.

## 2. Literature review

In this section, we provide a brief review of the related literature on institutional determinants of FDI and government recentralisation. The institutional background on the pilot recentralisation reform in Vietnam is also discussed.

## 2.1. Institutional determinants of FDI

An extensive evidence base now exists which examines the underlying determinants of FDI. Results emanating from this evidence base suggest that economic growth (Chowdhury & Mavrotas, 2006; Zhao & Du, 2007), human capital (Mina, 2007; Noorbakhsh et al., 2001), natural resource endowment (Asiedu, 2006), the level of infrastructure development (Cheng & Kwan, 2000), and market size (Bevan & Estrin, 2004) can exert significant impacts on FDI inflows.

Another established strand of literature has focused on institutional determinants of FDI and suggests that, since local institution can determine transaction costs and provides a *'structure'* for business interactions, it can either impede or foster the investment incentives of investors (Meyer, 2001; Williamson, 1985). Dunning (1988) proposes the ownership-location-international paradigm in which institutions constitute the second pillar, i.e. the locational advantage harvested by MNEs in the domestic market. This is because, unlike other mobile factors such as labours and capital that can be shifted from a place to one another, institutional factors are immobile and deeply embedded in a society within a confined geographical area (Mudambi & Navarra, 2002). Meyer et al. (2009) further corroborate this point by showing that institutions determine the extent to

which foreign investors can access and exploit local scarce resources to foster their investment projects. Subsequently, Du et al. (2012) investigate the choices of location by foreign investors and find that regions which a higher degree of contract enforcement, a greater government intervention in business, a better intellectual property right protection and lower corruption attract more FDI from the more culturally distant countries. Likewise, Godinez and Liu (2015) confirm that a high level of corruption in the host countries may constrain FDI from countries with lower corruption levels because of foreign investors' unfamiliarity with the local business environment.

Another strand of research also examines the institutional impacts on a wide range of MNEs' decisions in the domestic market, such as ownership structure and penetration strategies. For example, Henisz (2000) suggests that political hazards encourage MNEs to form joint-ventures over wholly-owned affiliates. This is because partnering with a local firm which has the advantage of dealing with a local government may actually reduce the risk of government expropriation as long as the contractual hazard is sufficiently low. Yiu and Makino (2002) later reinforce this finding by showing that, under a higher degree of state influences, a joint-venture is a more popular type of ownership structure. Luu et al. (2019) distinguish between greenfield investment and merger and acquisitions (M&As), and conclude that corruption severity in the host economy promotes greenfield investments while reducing cross-border M&As. In a similar vein, Tran and Le (2019) provide the evidence that governance quality affects the relationship between FDI and different types of entrepreneurship in emerging markets. More recently, Kamal et al. (2020) examine the interactive effect of institutions and resource seeking strategies by showing that Chinese MNEs tend to increase their investments in countries with rich fuel resources where there is high corruption, since corruption can create rent-seeking opportunities in such an inelastic sector.

## 2.2 Decentralisation and recentralisation

Decentralisation has been one of the most significant development priorities pursued by many countries worldwide over the past few decades (Billing, 2019; Yusuf, 1999). Extant theories suggest that the devolution of power to local governments enables policies to be tailored in such a way that they best suit local needs (Oates, 1972). This is because the proximity between local government and local people can enrich the bureaucrats with a knowledge of local contexts as well as local citizens' preferences (Grossman et al., 2017). By contrast, the central government may be substantially circumscribed on the information necessary to design appropriate policies on public service delivery (Bardhan, 2002). Malesky (2019) provides support for these propositions and documents where, under a decentralised regime, the local government can formulate specialised policies to accommodate firms' needs which may vary across different subnational administrative units.

Decentralisation may also strengthen the monitoring capability of local constituents by giving them the power to select the local bureaucrats capable of serving their interests while disciplining the local officials who fail to do so. In a well-decentralised system, voters often have better information about local politicians (Grossman et al., 2017), and misconduct can be detected more easily by an onsite watchdog rather than by a faraway national monitoring agency (Malesky, 2019). In this sense, lower-level governments are more directly accountable for their actions, thereby giving them more incentives to improve their administrative performance and provide better policies.

Decentralisation can also play a role in fostering inter-jurisdiction competition for local government by attracting labour and capital (Tiebout, 1956; Weingast, 1995). Research shows that decentralisation often leads to the creation of many subnational administrative units with relatively similar functions, and therefore enables workers and businesses to seek alternative jurisdictions if they encounter dissatisfying services or treatment in a given place (Matei & Popa, 2010). The competition pressure may encourage local governments to ameliorate the quality of public services provided (Fisman & Gatti, 2002; Matei & Popa, 2010), and incentivises local governments to improve the investment climate for foreign investors (Kessing et al., 2007).

However, the aforementioned benefits of decentralisation might not be achieved in practice (Falleti, 2010). Anecdotal evidence shows that decentralisation can have its own problems, including lower government capacity (Billing, 2019), coordination failure (Kessing et al., 2007), over-regulation (Kalamova, 2008), overlapping function (Malesky et al., 2014), and elite capture (Bardhan, 2002). Specifically, the existence of various smallscaled sub-national administrative units with similar functions are often associated with inferior government capacity (Billing, 2019; Halimatusa'diyah, 2020). It has been documented that lower-level administrative units in a severe fragmented government system may suffer from the lack of the financial resources, human capital and infrastructures necessary for an effective decision-making process (Grossman et al., 2017). They are also less capable of providing large-scale public goods owing to the disadvantage in economies of scale and high administrative costs (Billing, 2019). In addition, when decentralisation generates multi-layers of government which have independence in decision making, it is difficult for them to reach collective outcomes, such as in terms of regulation, taxation and the approval of investment projects (Kessing et al., 2007). Such coordination failures can create many hold-up processes and subsequently reduce the attractiveness of the region to investment (Kalamova, 2008). Decentralisation may cause further inefficiency due to overlapping functions, over-regulation and over-taxation (Kalamova, 2008; Kessing et al., 2007). The devolution of authority to lower-level governments can increase the discretionary power of local officials in implementing both law and policies that could be utilised for rent seeking purposes (Ivanyna & Shah, 2011). In addition, it is also a possibility that local governments are captured by the local elite, under which rivalry groups influence local governments and twist policies in their favour (Bardhan, 2002; Bardhan & Mookherjee, 2006). In this regard, locally devised policies would fail to accommodate general public interest.

These drawbacks, in many cases, can outweigh the potential benefits of decentralisation, which, therefore, induces many countries to start reversing the process through recentralisation reforms (Dickovick, 2011; Eaton & Dickovick, 2004). Given that the main purpose of recentralisation is to enhance the efficiency and accountability of the government, it is not surprising that most of the existing studies on recentralisation, albeit limited, chiefly focus on public service delivery as a potential outcome. For example, Saltman (2008) provides justifications for the recentralisation trend of health policies in many European countries in the early 21st century and contend that such reforms are adopted to ensure that equal health services provide adequate government funding for increasingly expensive care needs of a vulnerable population. Likewise, Akilli and Akilli (2014) investigate the recentralisation of authority around metropolitan municipalities in Turkey, and highlight that the recentralisation could help to avoid coordination failures, 550 🛞 H. N. LUU ET AL.

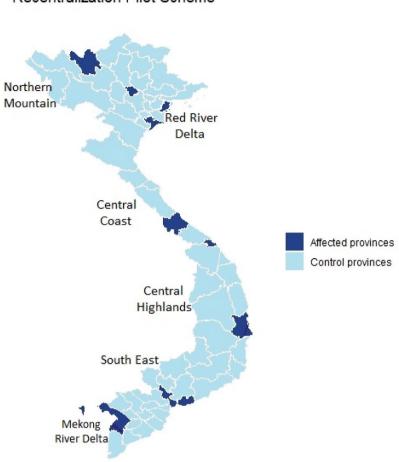
increase economies of scale and, ultimately, enhance the capability of the government to provide quality public services and fair distribution of resources. Malesky et al. (2014) evaluate the impact of government recentralisation reform on public service provisions in Vietnam. They document that that recentralisation reduces the risk of public power being captured by local interest groups, which therefore allows the local government to serve the need of the local public by enhancing the guality of a wide range of public services. Kostka and Nahm (2017) examine the recentralisation trend in environmental governance in China and suggest that more stringent environmental laws and sanctions, a tightened control of central government and advanced nationwide monitoring programmes under a more centralised regime potentially lead to improved environmental outcomes. By contrast, some studies reveal the undesirable outcomes of recentralisation. Bartlett (2001) documents that the stagnant economic growth, escalating unemployment rate and high inflation in Uzbekistan are the consequences of economic recentralisation where the central government has an excessive control over prices, production schemes, loans and foreign exchange regime. Chen (2004) models the extent to which fiscal recentralisation in China exerts grabbing-hand corruption behaviours. Zhu and Zhao (2018) further suggest that, although the fiscal recentralisation encourages the adoption and dissemination of innovative welfare policies by sub-national government to gain central revenue transfers, such incentives diminish once the central government recognises the policy and starts to implement it on a national scale.

## 2.3. Institutional background – the pilot recentralisation reform in Vietnam

Vietnam follows a one-party system led by the Communist Party of Vietnam. The Vietnamese government hierarchy has both a horizontal dimension and a vertical dimension. The vertical government structure consists of the central, provincial, district and commune levels. Each subnational level is horizontally divided into executive (People's Committee), legislative (People's Council) and judiciary (People's Court) branches.

In 2008, the National Assembly passed Resolution 26/QH12 allowing the piloting of recentralisation to take effect from April 25th, 2009 aiming to relieve bureaucratic burden and enhance the overall government efficiency. Ten provinces were subsequently selected to take part in the pilot recentralisation reform program. These provinces were: Lao Cai, Vinh Phuc, Hai Phong, Nam Dinh, Quang Tri, Da Nang, Phu Yen, Ho Chi Minh City, Ba Ria – Vung Tau and Kien Giang. The selection process was designed to ensure that there was a balance among regions, rural and urban areas, as well as socio-economic performance, thereby minimising a heterogeneity problem in subsequent evaluation studies. Figure 1 illustrates the geographic location of provinces under the recentralisation pilot scheme.

Accordingly, the District People's Councils in the pilot provinces were dismissed and their functions were assigned to Provincial People's Committees and Provincial People's Councils. The District People's Councils are the second administrative level in the legislature branch, below the central and provincial levels, and above the commune level. The first function of the District People's Council is to appoint and dismiss personnel of subnational government bodies within their assigned power, including the District People's Committee, Court, Procuracy and other offices. Secondly, the District People's Council has the right to approve annual socio-economic development plans, budget estimates, and also adopt public policies on education, infrastructure, healthcare,



## Recentralization Pilot Scheme

Figure 1. Provinces under recentralisation pilot scheme (Source: Synthesised by authors).

agriculture and poverty-alleviation. District People's Councils are responsible for overseeing the activities of district authorities and controlling the compliance to laws exercise in the locality.

Arguably, the removal of District People's Councils could have a significant impact on the institutional arrangements and local social-economic environment. The release of the plan was made visible for the general public, and attracted considerable attention from the media, political leaders and industry practitioners, including foreign investors. Given that foreign firms often scrutinise the local institutional environment upon entry (Meyer & Nguyen, 2005; Mudambi & Navarra, 2002), their expectation of the major changes in the political environment following the recentralisation reform can influence investment decisions. More importantly, since the pilot recentralisation reform program was administrated at the highest level of central government, it should have no apparent relation to incumbents' prior or intended investment incentives of foreign investors. Taken together, we argue that this constitutes a good shock for our quasi-natural experimental design to examine the impact of recentralisation reform on FDI inflow.

## 3. Model specification and data

## 3.1 Model specification

To investigate the impact of recentralisation on FDI, we follow a method in a similar spirit to that of Malesky et al. (2014) and exploit the sudden change in government hierarchy as an exogenous shock in our difference-in-difference (DiD) model. We consider ten provinces experiencing the pilot recentralisation as the affected group while the remaining fifty-three provinces are the control group. This approach allows us to compare the change in the FDI levels of the affected provinces after recentralisation took place with the change in FDI levels of control provinces that are not part of the pilot. Our DiD model is specified as follows:

$$FDI_{it} = \beta_0 + \beta_1 AFFECTED_i + \beta_2 POST_t + \beta_3 AFFECTED_i \times POST_t + \beta_4 X_{it} + \varepsilon_{it}$$
(1)

where  $FDI_{it}$  is the natural logarithm of the newly registered FDI inflow in province *i* at time *t*. *AFFECTED<sub>i</sub>* is the dummy variable and takes the value of one if the province is affected by the resolution and zero otherwise.  $POST_t$  is the time variable which equals one for observations in post-intervention period of 2009 to 2013, and zero otherwise. The coefficient  $\beta_3$  on the interaction term *AFFECTED<sub>i</sub>*×*POST<sub>t</sub>* is the 'difference-in-difference' estimator. It identifies the causal effect of the recentralisation reform by comparing the difference in the level of FDI inflow pre- and post-recentralisation of the affected group to the difference in the level of FDI inflow pre- and post-recentralisation of the control group.

We also incorporate a set of control variables **X** that may influence the level of FDI inflow as suggested by previous literature (Ang, 2008; Boateng et al., 2015; Luu et al., 2019; Mina, 2007; Tang, 2009; Vo, 2018). Specifically, we include *POPULATION*, *URBANRATE*, *HUMANCAP*, *EXPORT*, *ELECTRICITY*, *TRANSPORTATION* and *INFLATION* into our model specification. *POPULATION* is the natural logarithm of total provincial population per 1 km2; *URBANRATE* is the share of urban population to the total population; *HUMANCAP* is the proportion of people attaining tertiary education in the province; *EXPORT* is measured as the natural logarithm of the province's exports; *ELECTRICITY* is a proxy for provincial infrastructure development, measured by the proportion of households with access to electricity; *TRANSPORTATION* is another proxy for provincial infrastructure development and is measured as the natural logarithm of the total number of passengers carried. Finally, *INFLATION* is the change in the provincial consumer price index.

Variables and their definitions are provided in Table 1. Standard errors ( $\varepsilon_{it}$ ) are two-way clustered at the province and year levels.

| Variable Name  | Variable Definition  | Source |
|----------------|--|--------|
| FDI            | The natural logarithm of the newly registered FDI inflows at the provincial level    | GSO    |
| EXPORT         | The natural logarithm of the total exports in the province                           | GSO    |
| POPULATION     | The natural logarithm of the total number of people per 1 km2                        | GSO    |
| URBANRATE      | The ratio of provincial urban population to total provincial population              | GSO    |
| HUMANCAP       | The ratio of people attaining tertiary education in the province to total population | GSO    |
| ELECTRICITY    | The ratio of households with access to electricity at provincial level               | GSO    |
| TRANSPORTATION | The natural logarithm of the total number of passengers carried                      | GSO    |
| INFLATION      | The change in the provincial consumer price index                                    | GSO    |

Table 1. Variable definitions.

## 3.2. Data

Provincial data used in our analysis is retrieved from the General Statistics Office of Vietnam (GSO) for the period from 2005 to 2014.<sup>3</sup> This period includes four years prior to when the pilot recentralisation took place in 2009 and six years after that. The final dataset comprises 487 province-year observations of 63 provinces over a ten-year period.

Table 2 presents descriptive statistics of the variables used in our analysis. Panel A shows the statistics for the full sample, while Panel B reports the statistics for the split samples of the affected group and the control group in the pre-recentralisation period. The mean value of *FDI* for the full sample is 4.328. In the pre-recentralisation period, the mean value of *FDI* in affected provinces (those participating in the pilot recentralisation reform) is 5.458, whereas the mean value of *FDI* in control provinces (those which are not part of the reform) is slightly lower, at 3.663. On average, the sum of exports and imports account for 77.6% of the total provincial GDP. The mean value of total provincial population per 1 km2 (in natural log) is 3.634, while the average proportion of the population living in urban area is 25%. The average proportion of people with a tertiary education is 77.6%. Regarding the level of infrastructure development, the average proportion of households with access to electricity is 94%, while the average number of passengers carried (in natural log) is 2.315. Finally, the average change in provincial consumer price index is 1.3%.

Table 3 reports the correlation matrix for the main variables employed in our analysis. As can be seen from the Table, *FDI* is positively correlated with trade openness (*OPENNESS*), population density (*POPULATION*), urbanisation rate (*URBANRATE*), the level of human capital (*HUMANCAP*) and infrastructure development (*ELECTRICITY* and *TRANSPORTATION*). Such correlations between FDI and control variables are consistent with the predictions of previous literature on the determinant of FDI inflow (Ang, 2008; Asiamah et al., 2019; Asiedu, 2006; Choong & Lam, 2010; Kang & Jiang, 2012; Mina, 2007). All of the other correlations are less than 0.5. Multicollinearity is also being tested using the Variance Inflation Factor (VIF) test, and since all of the reported values are well below 3, multicollinearity is presumed as not being an issue that affects our results.

| /ariables  | Obs.                     | Mean                             | Sd.                              | p25                              | p50                          | p75                  |
|--|--------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------|----------------------|
| ÐI   | 487                      | 4.328                            | 2.123                            | 2.708                            | 4.369                        | 5.927                |
| EXPORT   | 487                      | 5.758                            | 1.887                            | 4.718                            | 5.817                        | 6.722                |
| POPULATION   | 487                      | 3.634                            | 4.990                            | 0.772                            | 1.774                        | 4.676                |
| JRBANRATE  | 487                      | 0.255                            | 0.163                            | 0.149                            | 0.196                        | 0.306                |
| HUMANCAP   | 487                      | 0.776                            | 1.205                            | 0.200                            | 0.403                        | 0.814                |
| ELECTRICITY  | 487                      | 0.940                            | 0.100                            | 0.934                            | 0.983                        | 0.996                |
| TRANSPORTATION   | 487                      | 2.315                            | 1.334                            | 1.435                            | 2.303                        | 3.140                |
| NFLATION   | 487                      | 0.013                            | 0.022                            | 0.002                            | 0.005                        | 0.012                |
| JRBANRATE<br>HUMANCAP<br>ELECTRICITY<br>FRANSPORTATION | 487<br>487<br>487<br>487 | 0.255<br>0.776<br>0.940<br>2.315 | 0.163<br>1.205<br>0.100<br>1.334 | 0.149<br>0.200<br>0.934<br>1.435 | 0.19<br>0.40<br>0.98<br>2.30 | 96<br>03<br>33<br>03 |

 Table 2. Descriptive statistics – Full sample.

Notes: This table contains descriptive statistics of the variables used in our analysis. *FDI* is the natural logarithm of the newly registered FDI inflows at the provincial level. *EXPORT* is the natural logarithm of the total exports in the province, *POPULATION* is the natural logarithm of the total number of people per 1 km2, *URBANRATE* is the ratio of urbane population to total population, *HUMANCAP* is the ratio of people attaining tertiary education to total population, *ELECTRICITY* is the ratio of households with access to electricity, *TRANSPORTATION* is the natural logarithm of total number of passengers carried and *INFLATION* is the change in the provincial consumer price index.

## Table 3. Correlation matrix.

|   |                | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8    | VIF  |
|---|----------------|--------|--------|--------|--------|--------|--------|--------|------|------|
| 1 | FDI            | 1.000  |        |        |        |        |        |        |      |      |
| 2 | EXPORT         | 0.607* | 1.000  |        |        |        |        |        |      | 2.34 |
| 3 | POPULATION     | 0.302* | 0.352* | 1.000  |        |        |        |        |      | 1.50 |
| 4 | URBANRATE      | 0.350* | 0.418* | 0.308* | 1.000  |        |        |        |      | 2.04 |
| 5 | HUMANCAP       | 0.270* | 0.303* | 0.414* | 0.657* | 1.000  |        |        |      | 2.11 |
| 6 | ELECTRICITY    | 0.396* | 0.465* | 0.218* | 0.254* | 0.222* | 1.000  |        |      | 1.22 |
| 7 | TRANSPORTATION | 0.391* | 0.707* | 0.412* | 0.512* | 0.458* | 0.460* | 1.000  |      | 2.40 |
| 8 | INFLATION      | 0.011  | -0.015 | -0.005 | -0.004 | 0.010  | -0.011 | -0.015 | 1.00 | 1.01 |

Notes: This Table reports the correlation coefficients between variables employed in our analysis. Variable definitions are provided in Table 1. \* indicates the statistical significance at a 5% level.

# 4. Empirical results

## 4.1 Testing for parallel trend assumption

In order to ensure a reliable causal effect, a DiD analysis must satisfy the 'Parallel Trend' assumption. This assumption requires the unobserved differences between the affected and the control group to remain unchanged over time in the absence of the shock. In other words, the outcomes in both groups have to exhibit an equal trend in the preintervention period. If this assumption is violated, our results may be driven by other omitted shocks rather than the recentralisation reform per se.

In this paper, the level of FDI inflows in both affected and control groups has to follow a similar growth pattern prior to the adoption of the recentralisation reform in 2009. To test for the parallel trend assumption, we perform an independent t-test for this and present the results in Table 5. The results in Table 4 reveal that there are no statistically significant differences in the FDI trend between the provinces affected by the recentralisation shock compared to those that are unaffected. Thus, our DiD approach satisfies the "Parallel Trend" assumption.

# 4.2 Baseline results

Table 4 reports the estimation results of Equation (1) to investigate the impact of recentralisation on FDI inflow. Column 1 shows the result of the model (1) without incorporating any time-varying province specific variables. A central condition for drawing causal inferences is the exogeneity of the treatment (i.e. the pilot recentralisation reform). In this regard, the magnitude of the DiD term (i.e. *AFFECTED*×*POST*) should remain unaffected by the incorporation of other time-varying controls if the treatment is to be

|         | Variable                  | Mean growth Affected group | Mean growth Control group | Difference | P-value |
|---------|---------------------------|----------------------------|---------------------------|------------|---------|
| Panel A | FDI Growth<br>(2005–2008) | 0.493                      | 0.647                     | 0.154      | 0.362   |
| Panel B | FDI Growth<br>(2005–2006) | 0.509                      | 0.573                     | 0.064      | 0.452   |

| Table 4. | Testing | for | parallel | trend | assum | ption |
|----------|---------|-----|----------|-------|-------|-------|
|----------|---------|-----|----------|-------|-------|-------|

Notes: This table presents the results of the statistical test for parallel trend assumption by comparing the average change of the dependent variables (natural log of new FDI inflows) between affected provinces and control provinces in the pre-recentralisation period. Panel A compares the mean change of FDI inflows between affected provinces and control provinces over the period from 2005 to 2008. Panel B compares the mean change of FDI inflows between the affected provinces and control provinces over the period from 2005 to 2006 after excluding the crisis period from 2007 to 2009.

|                | Ln(FDI)   | Ln(FDI)  | Ln(FDI)  |
|----------------|-----------|----------|----------|
|                | (1)       | (3)      | (4)      |
| AFFECTED×POST  | -0.974*** | -0.771** | -0.851** |
|                | (0.334)   | (0.345)  | (0.337)  |
| POST           |           | -0.133   |          |
|                |           | (0.429)  |          |
| EXPORT         |           | 0.229**  | 0.213*   |
|                |           | (0.096)  | (0.107)  |
| POPULATION     |           | -0.031** | -0.055*  |
|                |           | (0.013)  | (0.026)  |
| URBANRATE      |           | -0.024   | 0.067    |
|                |           | (1.628)  | (1.761)  |
| HUMANCAP       |           | 0.982    | -10.181  |
|                |           | (9.056)  | (9.235)  |
| ELECTRICITY    |           | 6.076**  | 5.731**  |
|                |           | (2.347)  | (1.506)  |
| TRANSPORTATION |           | 0.864    | -0.275   |
|                |           | (0.571)  | (0.468)  |
| INFLATION      |           | 0.003    | -0.000   |
|                |           | (0.003)  | (0.002)  |
| Constant       | 4.269***  | -3.721   | 4.498**  |
|                | (0.023)   | (3.123)  | (1.867)  |
| Province FEs   | YES       | NO       | YES      |
| Year FEs       | YES       | YES      | YES      |
| Observations   | 487       | 487      | 487      |
| R-squared      | 0.645     | 0.618    | 0.650    |

## Table 5. The effect of Recentralisation on FDI.

Notes: This Table reports the results of DiD regression to evaluate the impact of recentralisation on FDI inflows. The dependent variable is FDI, measured by the natural log of the newly registered FDI inflows. *POST* is a dummy variable equal to one for the period from 2009 to 2014, and zero otherwise. *AFFECTED* is a dummy variable equal to one if the province is selected to take part in the pilot recentralisation reform, and zero otherwise. The interaction term *AFFECTED*×*POST* is the DiD estimation. Definitions of all other variables are provided in Table 1. Standard errors are two-way clustered at province and year levels. \*\*\*, \*\* and \* denote significant levels at 1%, 5% and 10%, respectively.

assumed to be as good as random (Roberts & Whited, 2013). For this reason, we first estimate model (1) without incorporating control variables. In column 2, we add a number of province-specific control variables. We also use year fixed effects in order to control for time-invariant factors that may have affected our results. Finally, column 3 presents the result of the tightest specification when all control variables, along with year and province fixed effects are incorporated into the model specification.

As can be seen from the table, the estimated coefficients on *AFFECTED*×*POST* are negative and statistically significant across all of the columns. This illustrates that the level of FDI is significantly reduced in affected provinces following the recentralisation reform when compared to provinces that are not part of the reform. This finding provides support to the proposition that recentralisation reduces the investment incentives of foreign investors, and thus negatively affects FDI inflow. Arguably, recentralisation may lead to a lack of local preferences and cause policy priorities to shift from local resident interests to that of the national government (Malesky et al., 2014). Such a reform might also inhibit the information flow between the central government and foreign firms (Crook & Manor, 2018; Regmi et al., 2010), leading to a less transparent investment environment for FDI. Our finding therefore also provides support for the studies by Drabek and Payne (2002) and Shroff et al. (2014), which find that transparency and FDI are positively related.

556 🛞 H. N. LUU ET AL.

Other control variables also provide some important insights. The estimated coefficient of *EXPORT* is positive and significant, indicating that a greater level of export facilitates foreign investment. This result is therefore in line with many previous studies. Similarly, the coefficients of *ELECTRICITY* are positive and statistically significant, suggesting that infrastructure development is an important factor which helps to attract more FDI inflow (Ang, 2008; Khadaroo & Seetanah, 2010; Tang, 2009). On the other hand, a host country's population level and FDI are negatively associated, indicated by the negative and significant coefficients on *POPULATION*.

## 5. Additional analyses

## 5.1 Robustness tests

In order to ensure the robustness of our baseline results, we perform a number of additional tests and present the results in Table 6.

In the first set of tests, we use different types of fixed effects to check to see if our results still hold. Specifically, in Column 1, we retain province fixed effects and replace year fixed effects with economic region-year fixed effects.<sup>4</sup> The incorporation of economic region-year fixed effects allows us to absorb all variables that do not vary across the provinces within a given economic region and year (e.g. policy incentives from the government or regional competition). In Column 2, instead of using economic region-year fixed effects, we use geographic region-year fixed effects along with province fixed effects. In Column 3, we use economic region-year trend fixed effects in order to control for pre-trends in the data. Overall, the estimated coefficients of *AFFECTED*×*POST* remain negative and statistically significant across all of the models.

One may also be concerned that our results could be affected by the financial crisis, which occurred during the period of this study. To mitigate this concern, we exclude the financial crisis period (from 2008 to 2009) from the analysis and re-estimate our model accordingly. The results are provided in Column 4. In Column 5, we follow the common practice in the economic literature (Kim & Li, 2014) and lag all of the right-hand-side variables for one year to avoid a simultaneous bias problem. In Column 6, we winsorise our data at 1% and 99% percentiles to attenuate the concern that our results could be affected by outliers. Finally, in Column 7, we restrict our data and sample for the period from 2005 to 2012 in order to obtain the balance between the pre-recentralisation period (i.e. four years, from 2005 to 2008) and the post-recentralisation period (i.e. four years, from 2005 to 2012). Overall, the results of the additional tests provide support for our prior finding that recentralisation results in a lower FDI inflow.

# 5.2 Falsification tests

We perform two falsification tests to examine the validity of our DiD approach further. The results are presented in Table 7.

First, we employ placebo event windows in the pre-treatment period (i.e. the period from 2005 to 2008) and re-estimate Equation (1) to ensure that previous trends do not contribute to our results. Specifically, we falsely assume that the recentralisation reform

|   | Economic region-<br>year FEs and Province              | Geographic region-<br>year FEs and Province           | Economic region-year<br>trend FEs and Province             | Exclude crisis period                                | Lag all right-hand-<br>side control         |                                      | Balanced pre- and post-treatment |
|---|--|---|--|--|---|--------------------------------------|----------------------------------|
|   | FES  | FES   | FEs  | (from 2007 to 2009)                                  | variables                                   | Winsorised                           | period                           |
|   | (1)  | (2)   | (3)  | (4)  | (5)   | (9)                                  | (2)                              |
| AFFECTED×POST   | -0.975***  | -0.955***   | -0.864***  | -1.101**   | -0.997***                                   | -0.916***                            | -0.771**                         |
|   | (0.148)  | (0.193)   | (0.204)  | (0.346)  | (0.247)                                     | (0.238)                              | (0.255)                          |
| Constant  | 2.591  | 5.031*  | -1.304   | 3.195  | 5.321*                                      | 4.239**                              | 4.284**                          |
|   | (3.160)  | (2.420)   | (3.653)  | (3.006)  | (2.533)                                     | (1.811)                              | (1.733)                          |
| Other Controls  | YES  | YES   | YES  | YES  | YES   | YES                                  | YES                              |
| Economic Region-Year FEs  | YES  | NO  | NO   | NO   | NO  | N                                    | N                                |
| Geographic Region-Year FEs  | N  | YES   | NO   | NO   | NO  | N                                    | N                                |
| Province FEs  | YES  | YES   | YES  | YES  | YES   | YES                                  | YES                              |
| Year FEs  | N  | NO  | NO   | YES  | YES   | YES                                  | YES                              |
| Economic Region-Year Trend FEs  | N  | NO  | YES  | NO   | NO  | NO                                   | NO                               |
| Observations  | 487  | 487   | 487  | 335  | 487   | 487                                  | 381                              |
| R-squared   | 0.719  | 0.689   | 0.627  | 0.678  | 0.647                                       | 0.651                                | 0.678                            |
| Notes: This Table reports a number of robustness tests to examine the effect of recentralisation on provincial FDI inflows. Column 1 shows the results of the model using economic region-yea   | of robustness tests to ex                              | amine the effect of recen                             | itralisation on provincial Fl                              | 01 inflows. Column 1 sho                             | ows the results of th                       | ne model using                       | economic region-year             |
| fixed effects and province fixed effects. Column 2 shows the results when the geographic region-year fixed effects and province fixed effects are incorporated. Column 3 shows the results of   | ffects. Column 2 shows th                              | he results when the geog                              | iraphic region-year fixed e                                | fects and province fixed                             | d effects are incorpo                       | orated. Column                       | 3 shows the results of           |
| the model using economic region-year trend fixed effects and province fixed effects. In Column 4, we exclude the economic crisis period (from 2007 to 2009). In Column 5, all right-hand-side   | -year trend fixed effects                              | and province fixed effect:                            | s. In Column 4, we exclude                                 | the economic crisis per                              | riod (from 2007 to 2                        | 009). In Column                      | 5, all right-hand-side           |
| control variables are lagged for one year to further mitigate endogeneity. Column 6 reports the results when all control variables are winsorised at 1% on both tails. Column 7 presents the  | one year to further mitiga                             | te endogeneity. Column                                | 6 reports the results when                                 | n all control variables ar                           | e winsorised at 1%                          | on both tails. C                     | olumn 7 presents the             |
| results of the restricted sample (from 2005 to 2012) to ensure a balance between the pre- and post-recentralisation periods. Other controls are also included, although they are not presented for brevity. Standard errors (in parentheses) are two-way clustered at province and year level. ***, ** and * denote significant levels at 1%, 5% and 10%, respectively. | rom 2005 to 2012) to ensi<br>arentheses) are two-way i | ure a balance between th<br>clustered at province and | ie pre- and post-recentrali<br>d year level. ***, ** and * | iation periods. Other co<br>denote significant level | ntrols are also inclu<br>s at 1%, 5% and 10 | ded, although th<br>%, respectively. | iey are not presented            |

| tests.   |
|----------|
| bustness |
| 2        |
| 6        |
| ble      |
| Tal      |

## Table 7. Falsification tests.

|                | Placebo event<br>in 2006 | Placebo event<br>in 2007 | Randomly assigned<br>affected provinces |
|----------------|--------------------------|--------------------------|---|
| Variables      | (1)                      | (2)                      | (3)                                     |
| AFFECTED×POST  | -0.063<br>(0.419)        | -0.031<br>(0.727)        | -0.047<br>(0.361)                       |
| Constant       | -0.407<br>(7.151)        | -0.168<br>(8.044)        | 4.013<br>(2.098)                        |
| Other Controls | YES                      | YES                      | YES                                     |
| Province FEs   | YES                      | YES                      | YES                                     |
| Year FEs       | YES                      | YES                      | YES                                     |
| Observations   | 184                      | 184                      | 487                                     |
| R-squared      | 0.741                    | 0.741                    | 0.65                                    |

Notes: This Table reports the results of the falsification test to identify the validity of our DiD model. The dependent variable is the natural log of the newly registered FDI inflows. The interaction term *AFFECTED*×*POST* is the DiD estimation. Column 1 shows the results when we falsely assume that the recentralisation reform happened in 2006. Column 2 reports the results when we falsely assume that the recentralisation reform took place in 2007. Column 3 provides the results of the randomly assigned affected provinces. Other controls are also included, although they are not presented for brevity. Standard errors (in parentheses) are two-way clustered at province and year levels. \*\*\*, \*\* and \* denote significant levels at 1%, 5% and 10%, respectively.

was enacted in 2007 and 2006, respectively. This is two years and three years prior to the actual event in 2009. If our baseline results indeed reflect the true causal effect of recentralisation, the estimated coefficients of the DiD coefficient shall not be statistically significant in any of the falsification tests. The results reported in Columns (1) and (2) provide support for the validity of our model specification. The estimated coefficients of *AFFECTED*×*POST* in Columns (1) and (2) are not statistically significant, implying that there is no significant difference in FDI inflows between the affected and control provinces *before* the actual event occurs in 2009.

In Column (3), we represent the results of another falsification test in which we employ an artificially affected group. We randomly selected ten provinces from the control group (i.e. those which have never experienced a recentralisation reform) to form the artificially affected group and re-estimate Equation (1) accordingly. Since the falsely assigned provinces are not affected by the recentralisation, we should observe no impact on the outcome variable. As can be seen from Column (3), the coefficient on *AFFECTED*×*POST* is not statistically significant, implying that there are no underlying differences in trends between the affected and control provinces that may bias the results.

# 6. Conclusion

Recentralisation is a major government reform that could have immense impacts on various aspects of the economy and society. The reform can be implemented when the central government notices the unsatisfying outcomes from past decentralisation in which the local governments are endowed with too much power, leading to discretionary behaviours in implementing laws and policies (Dickovick, 2011). The recentralisation reform is expected to enable higher levels of government to regain adequate responsibilities, controls and powers to address the problems of a decentralised system, such as bureaucratic burden and overlapping functions of administrative units (Filion et al., 2016; Malesky et al., 2014). However, whether a recentralisation reform can achieve its intended purpose and contribute to the overall sustainable development goal is still unclear.

Using the pilot removal of the District People's Council in ten provinces of Vietnam in 2009 as a quasi-experiment, we assess the impact of recentralisation reform on FDI inflow. The result highlights a potential drawback of recentralisation in that such a restructuring of a government may lead to a significant deterioration in the investment incentives of foreign investors, as indicated by lower FDI inflows following the reform. This suggests that a recentralisation reform can reduce the attractiveness of the market, possibly by causing a lack of local preferences in policy making, limiting the opportunity of foreign investors to take advantage of local public favours and engendering a less transparent investment environment. These results are consistent across a number of model settings and robustness tests.

Overall, our results provide important policy implications for countries where FDI is perceived as a key determinant of growth and development. Policy makers must be cautious when initiating a major restructuring of the government, because such a reform can affect the region's attractiveness to FDI.

## Notes

- 1. Resolution No. 97/2019/QH14 of National Assembly piloting the organisation of urban government in Hanoi, on 27 November 2019
- 2. Resolution No. 131/2020/QH14 of National Assembly piloting the organisation of urban government in Ho Chi Minh City, on 16 November 2020
- 3. Due to the lack of availability of data disclosed by the General Statistics Office, we are only able to obtain data for the period from 2005 to 2014. We also re-estimate our model using data covering the period from 2005 to 2012, which is four years before and after the pilot recentralisation took place. The results (provided in Table 6) remain consistent, thus providing robustness to our analysis.
- 4. There are seven economic regions in Vietnam, namely, Northwest, Northeast, Red River Delta, North Central Coast, South Central Coast, Central Highlands, Southeast and Mekong River Delta.

## Acknowledgments

This research is funded by Vietnam National Foundation for Science and Technology Development (NAFOSTED) under Grant No. 502.02-2020.09. The authors declare that there is no conflict of interest regarding the publication of this article.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).

# References

- Akilli, H., & Akilli, H. S. (2014). Decentralization and recentralization of local governments in Turkey. Procedia-Social and Behavioral Sciences, 140, 682–686. https://doi.org/10.1016/j.sbspro.2014.04.493
- Ang, J. B. (2008). Determinants of foreign direct investment in Malaysia. *Journal of Policy Modeling*, *30*(1), 185–189. https://doi.org/10.1016/j.jpolmod.2007.06.014
- Anwar, S., & Nguyen, L. P. (2010). Foreign direct investment and economic growth in Vietnam. *Asia Pacific Business Review*, *16*(1–2), 183–202. https://doi.org/10.1080/10438590802511031

560 👄 H. N. LUU ET AL.

- Asiamah, M., Ofori, D., & Afful, J. (2019). Analysis of the determinants of foreign direct investment in Ghana. Journal of Asian Business and Economic Studies, 26(1), 56–75. https://doi.org/10.1108/ JABES-08-2018-0057
- Asian Development Bank. (2019). Asia and Pacific Growth Steady Amid Global Trade Tensions. https:// www.adb.org/news/asia-and-pacific-growth-steady-amid-global-trade-tensions-adb
- Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *The World Economy*, *29*(1), 63–77. https://doi.org/10.1111/j.1467-9701.2006.00758.x
- Aziz, O. G. (2018). Institutional quality and FDI inflows in Arab economies. *Finance Research Letters*, 25, 111–123. https://doi.org/10.1016/j.frl.2017.10.026
- Balme, R., & Qi, Y. (2014). Multi-level governance and the environment: Intergovernmental relations and innovation in environmental policy. *Environmental Policy and Governance*, *24*(3), 147–232. https://doi.org/10.1002/eet.1635
- Bardhan, P. (2002). Decentralization of governance and development. *Journal of Economic Perspectives*, *16*(4), 185–205. https://doi.org/10.1257/089533002320951037
- Bardhan, P., & Mookherjee, D. (2006). *Decentralization and local governance in developing countries:*. a comparative perspective: Mit Press.
- Bartlett, D. L. (2001). Economic recentralization in Uzbekistan. *Post-Soviet Geography and Economics*, 42(2), 105–121. https://doi.org/10.1080/10889388.2001.10641165
- Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775–787. https://doi.org/10. 1016/j.jce.2004.08.006
- Billing, T. (2019). Government fragmentation, administrative capacity, and public goods: The negative consequences of reform in Burkina Faso. *Political Research Quarterly*, 72(3), 669–685. https:// doi.org/10.1177/1065912918800820
- Blanchard, O., & Shleifer, A. (2001). Federalism with and without political centralization: China versus Russia. *IMF Staff Papers*, 48(1), 171–179. https://doi.org/10.2307/4621694
- Boateng, A., Hua, X., Nisar, S., & Wu, J. (2015). Examining the determinants of inward FDI: Evidence from Norway. *Economic Modelling*, 47, 118–127. https://doi.org/10.1016/j.econmod.2015.02.018
- Chen, K. (2004). Fiscal centralization and the form of corruption in China. *European Journal of Political Economy*, 20(4), 1001–1009. https://doi.org/10.1016/j.ejpoleco.2003.12.003
- Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of International Economics*, 51(2), 379–400. https:// doi.org/10.1016/S0022-1996(99)00032-X
- Choong, C.-K., & Lam, S.-Y. (2010). The determinants of foreign direct investment in Malaysia: A revisit. *Global Economic Review*, 39(2), 175–195. https://doi.org/10.1080/1226508X.2010.483837
- Chowdhury, A., & Mavrotas, G. (2006). FDI and growth: What causes what? *The World Economy*, *29*(1), 9–19. https://doi.org/10.1111/j.1467-9701.2006.00755.x
- Crook, R., & Manor, J. (2018). Democratic Decentralization *Making Development work*, 1st, (Routledge 83–104).
- Dang, D. A. (2013). How foreign direct investment promote institutional quality: Evidence from Vietnam. *Journal of Comparative Economics*, 41(4), 1054–1072. https://doi.org/10.1016/j.jce.2013.05.010
- Demirbag, M., Tatoglu, E., & Glaister, K. W. (2010). Institutional and transaction cost determinants of Turkish MNEs' location choice. In *International Marketing Review*, 27(3), 272–294. https://doi.org/ 10.1108/02651331011047989
- Dickovick, J. T. (2011). *Decentralization and recentralization in the developing world*:. Comparative studies from Africa and Latin America: Penn State Press.
- Drabek, Z., & Payne, W. (2002). The impact of transparency on foreign direct investment. *Journal of Economic Integration*, 17(4), 777–810. https://doi.org/10.11130/jei.2002.17.4.777
- Du, J., Lu, Y., & Tao, Z. (2008). Economic institutions and FDI location choice: Evidence from US multinationals in China. *Journal of Comparative Economics*, 36(3), 412–429. https://doi.org/10. 1016/j.jce.2008.04.004
- Du, J., Lu, Y., & Tao, Z. (2012). Institutions and FDI location choice: The role of cultural distances. *Journal of Asian Economics*, 23(3), 210–223. https://doi.org/10.1016/j.asieco.2010.11.008

- Dunning, J. H. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Solutions. *Journal of International Business Studies*, *19*(1), 1–31. https://doi.org/10.1057/palgrave.jibs.8490372
- Eaton, K. (2001). Decentralisation, Democratisation and Liberalisation: The History of Revenue Sharing in Argentina, 1934–1999. *Journal of Latin American Studies*, 33(1), 1–28. https://doi.org/ 10.1017/S0022216X00006027
- Eaton, K. (2014). Recentralization and the left turn in Latin America: Diverging outcomes in Bolivia, Ecuador, and Venezuela. *Comparative Political Studies*, *47*(8), 1130–1157. https://doi.org/10.1177/0010414013488562
- Eaton, K., & Dickovick, J. T. (2004). The politics of re-centralization in Argentina and Brazil. In *Latin American Research Review* (pp. 90–122).
- Falleti, T. G. (2010). Decentralization and subnational politics in Latin America. Cambridge University Press.
- Filion, P., Kramer, A., & Sands, G. (2016). Recentralization as an alternative to urban dispersion: Transformative planning in a neoliberal societal context. *International Journal of Urban and Regional Research*, 40(3), 658–678. https://doi.org/10.1111/1468-2427.12374
- Fisman, R., & Gatti, R. (2002). Decentralization and corruption: Evidence from US federal transfer programs. Public Choice, 113(1/2), 25–35. https://doi.org/10.1023/A:1020311511787
- Godinez, J. R., & Liu, L. (2015). Corruption distance and FDI flows into Latin America. *International Business Review*, 24(1), 33–42. https://doi.org/10.1016/j.ibusrev.2014.05.006
- Goodspeed, T., Martinez-Vazquez, J., & Zhang, L. (2011). Public Policies and FDI Location: Differences between Developing and Developed Countries. In *FinanzArchiv/Public Finance Analysis*, 67(2), (pp. 171–191).
- Green, E. (2015). Decentralization and development in contemporary Uganda. *Regional & Federal Studies*, *25*(5), 491–508. https://doi.org/10.1080/13597566.2015.1114925
- Grossman, G., Pierskalla, J. H., & Boswell Dean, E. (2017). Government fragmentation and public goods provision. *The Journal of Politics*, 79(3), 823–840. https://doi.org/10.1086/690305
- Halimatusa'diyah, I. (2020). Does local government proliferation reduce maternal mortality? Evidence from Indonesian sub-national government. In *Asian Politics & Policy*, *12*(4), 592–616. https://doi.org/10.1111/aspp.12555
- He, X., Brouthers, K. D., & Filatotchev, I. (2013). Resource-based and institutional perspectives on export channel selection and export performance. *Journal of Management*, 39(1), 27–47. https:// doi.org/10.1177/0149206312445926
- Henisz, W. J. (2000). The institutional environment for multinational investment. *The Journal of Law, Economics, and Organization, 16*(2), 334–364. https://doi.org/10.1093/jleo/16.2.334
- Ivanyna, M., & Shah, A. (2011). Decentralization and corruption: New cross-country evidence. Environment and Planning. C, Government & Policy, 29(2), 344–362. https://doi.org/10.1068/c1081r
- Jin, H., Qian, Y., & Weingast, B. R. (2005). Regional decentralization and fiscal incentives: Federalism, Chinese style. *Journal of Public Economics*, 89(9–10), 1719–1742. https://doi.org/10.1016/j.jpu beco.2004.11.008
- Kalamova, M. (2008). Decentralization and Foreign Direct Investment: Evidence from the OECD Countries. mimeo.
- Kamal, M. A., Hasanat Shah, S., Jing, W., & Hasnat, H. (2020). Does the quality of institutions in host countries affect the location choice of Chinese OFDI: Evidence from Asia and Africa. *Emerging Markets Finance and Trade*, 56(1), 208–227. https://doi.org/10.1080/1540496X.2019.1610876
- Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business*, 47(1), 45–53. https://doi.org/10.1016/j.jwb.2010.10.019
- Kessing, S. G., Konrad, K. A., & Kotsogiannis, C. (2007). Foreign direct investment and the dark side of decentralization. *Economic Policy*, 22(49), 6–70. https://doi.org/10.1111/j.1468-0327.2007.00172.x
- Kessy, A. T., & McCourt, W. (2013). Is decentralization still recentralization? The local government reform programme in Tanzania. In *Public Sector Reform in Developing and Transitional Countries* (pp. 115–123). Routledge.

562 👄 H. N. LUU ET AL.

- Khadaroo, A., & Seetanah, B. (2010). Transport infrastructure and foreign direct investment. *Journal of International Development: The Journal of the Development Studies Association*, 22(1), 103–123. https://doi.org/10.1002/jid.1506
- Kim, P. H., & Li, M. (2014). Injecting demand through spillovers: Foreign direct investment, domestic socio-political conditions, and host-country entrepreneurial activity. *Journal of Business Venturing*, 29(2), 210–231. https://doi.org/10.1016/j.jbusvent.2012.10.004
- Kostka, G., & Nahm, J. (2017). Central-local relations: Recentralization and environmental governance in China. *The China Quarterly*, 231, 567–582. https://doi.org/10.1017/ S0305741017001011
- Kuswanto, K., Hoen, H. W., & Holzhacker, R. L. (2016). Decentralization, Foreign Direct Investment and Development in Indonesia. In *Decentralization and Governance in Indonesia* (pp. 105–143). Springer.
- Lewis, J. I. (2014). When decentralization leads to recentralization: Subnational state transformation in Uganda. *Regional & Federal Studies*, 24(5), 571–588. https://doi.org/10.1080/13597566.2014.971771
- Lui, F. T. (1985). An equilibrium queuing model of bribery. *Journal of Political Economy*, 93(4), 760–781. https://doi.org/10.1086/261329
- Luu, H. N., Nguyen, N. M., Ho, H. H., & Nam, V. H. (2019). The effect of corruption on FDI and its modes of entry. *Journal of Financial Economic Policy*, 11(2), 232–250. https://doi.org/10.1108/JFEP-05-2018-0075
- Malesky, E. J. (2019). Decentralization and Business Performance. In J. R. E. Wibbels (Ed.), Decentralized Governance and Accountability: Academic Research and the Future of Donor Programming (pp. 144–177). Cambridge University Press.
- Malesky, E. J., Nguyen, C. V., & Tran, A. (2014). The Impact of Recentralization on Public Services: A Difference-in-Differences Analysis of the Abolition of Elected Councils in Vietnam. In *American Political Science Review*, 108(1), (pp. 144–168). https://doi.org/10.1017/S0003055413000580
- Matei, A. I., & Popa, F. M.(2010). Impact of decentralization on the corruption phenomenon. *Selected Papers in Nemec, J., Peters, GB* (pp. 259–270)
- Meyer, K. E. (2001). Institutions, transaction costs, and entry mode choice in Eastern Europe. *Journal of International Business Studies*, 32(2), 357–367. https://doi.org/10.1057/palgrave.jibs. 8490957
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, *30*(1), 61–80. https://doi.org/ 10.1002/smj.720
- Meyer, K. E., & Nguyen, H. V. (2005). Foreign Investment Strategies and Sub-national Institutions in Emerging Markets: Evidence from Vietnam. *Journal of Management Studies*, 42(1), 63–93. https:// doi.org/10.1111/j.1467-6486.2005.00489.x
- Mina, W. (2007). The location determinants of FDI in the GCC countries. *Journal of Multinational Financial Management*, *17*(4), 336–348. https://doi.org/10.1016/j.mulfin.2007.02.002
- Mudambi, R., & Navarra, P. (2002). Institutions and internation business: A theoretical overview. International Business Review, 11(6), 635–646. https://doi.org/10.1016/S0969-5931(02)00042-2
- Muro, D. (2015). When do countries recentralize? Ideology and party politics in the age of austerity. *Nationalism & Ethnic Politics*, 21(1), 24–43. https://doi.org/10.1080/13537113.2015.1003485
- Noorbakhsh, F., Paloni, A., & Youssef, A. (2001). Human capital and FDI inflows to developing countries: New empirical evidence. *World Development*, *29*(9), 1593–1610. https://doi.org/10. 1016/S0305-750X(01)00054-7
- O'Neill, K. (2003). Decentralization as an electoral strategy. *Comparative Political Studies*, 36(9), 1068–1091. https://doi.org/10.1177/0010414003257098
- Oates, W. E. (1972). Fiscal Federalism. Edward Elgar.
- Regmi, K., Naidoo, J., Greer, A., & Pilkington, P. (2010). Understanding the effect of decentralisation on health services. *Journal of Health Organization and Management*, *24*(4), 361–382. https://doi.org/10.1108/14777261011064986
- Roberts, M. R., & Whited, T. M. (2013). Endogeneity in empirical corporate finance. In *Handbook of the Economics of Finance* (Vol. 2, pp. 493–572). Elsevier.

- Saltman, R. B. (2008). Decentralization, re-centralization and future European health policy. *The European Journal of Public Health*, *18*(2), 104–106. https://doi.org/10.1093/eurpub/ckn013
- Shroff, N., Verdi, R. S., & Yu, G. (2014). Information environment and the investment decisions of multinational corporations. *The Accounting Review*, 89(2), 759–790. https://doi.org/10.2308/accr-50643
- Stansel, D. (2005). Local decentralization and local economic growth: A cross-sectional examination of US metropolitan areas. *Journal of Urban Economics*, *57*(1), 55–72. https://doi.org/10.1016/j.jue. 2004.08.002
- Tang, C. F. (2009). Electricity consumption, income, foreign direct investment, and population in Malaysia. *Journal of Economic Studies* 36 4 371–382 doi:https://doi.org/10.1108/01443580910973583.
- Tiebout, C. M. (1956). A pure theory of local expenditures. *Journal of Political Economy*, 64(5), 416–424. https://doi.org/10.1086/257839
- Tran, N. H., & Le, C. D. (2019). Governance quality, foreign direct investment, and entrepreneurship in emerging markets. *Journal of Asian Business and Economic Studies*, 26(2), 238–264. https://doi.org/ 10.1108/JABES-09-2018-0063
- Treisman, D. (2007). *The architecture of government:*. Rethinking political decentralization: Cambridge University Press.
- Vo, X. V. (2018). Determinants of capital flows to emerging economies Evidence from Vietnam. *Finance Research Letters*, 27, 23–27. https://doi.org/10.1016/j.frl.2018.02.031
- Weingast, B. R. (1995). The economic role of political institutions: Market-preserving federalism and economic development. *Journal of Law, Economics, & Organization* 111, 1–31.
- Williamson, O. E. 1985. The economic institutions of capitalism In: Douglas. Free Press.
- Wunsch, J. S. (2001). Decentralization, local governance and ?recentralization? in Africa. Public Administration and Development: The International Journal of Management Research and Practice, 21(4), 277–288. https://doi.org/10.1002/pad.185
- Yiu, D., & Makino, S. (2002). The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization Science*, 13(6), 667–683. https://doi.org/10.1287/orsc.13.6. 667.494
- Yusuf, S. (1999). Entering the 21st Century: World Development Report, 1999/2000 (Vol. 22). World Bank Publications.
- Zhao, C., & Du, J. (2007). Causality between FDI and economic growth in China. *The Chinese Economy*, 40(6), 68–82. https://doi.org/10.2753/CES1097-1475400604
- Zhu, X., & Zhao, H. (2018). Recognition of innovation and diffusion of welfare policy: Alleviating urban poverty in Chinese cities during fiscal recentralization. *Governance*, 31(4), 721–739. https:// doi.org/10.1111/gove.12332