Do Autocratic Political Leaders Always Hamper Economic Growth? Evidence from Australia

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Abstract

We discuss the contribution of autocratic tendencies in democratically elected political leaders to the economic growth of developed economies. To this end, we exploit the unique election of Sir Charles Court as state premier of Western Australia in 1975 to estimate the contribution of autocratic state premiers to economic growth within a federal system of checks and balances based on a mixed Presidential and Westminster parliamentary institutional design. We hypothesize that some autocratic tendencies may help economic growth provided that discretion is used to address government failures which act as a brake on the economic development and could lead to institutional sclerosis, but which do not translate into corrupt practices and abuse of power for personal gain. Using the Synthetic Control Method, we match Western Australia with two large control samples of countries and regions to construct a counterfactual scenario in response to the administration of Court. Our estimates indicate a large positive per capita income gap that tends to increase over time and which provides evidence in support of the presence of structural break. Down to the present day, per capita income of Western Australia is 27 percent higher compared to its synthetic control group as a result of Court's premiership. The estimated growth impact of Court's administration is robust to a variety of placebo checks, it appears to be statistically significant at conventional levels, and does not seem to be confounded by the heterogeneity of the control samples.

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1 Introduction

The driver of development and the economic growth trajectory of minerals resource-abundant states lacking mature institutions has attracted much scholarship (Grier, 1999; Engerman et al., 1997; Acemoglu et al., 2002). For instance, Glaeser et al. (2004) suggested the existence of benevolent dictators may accelerate economic growth beyond the measurable effects of institutions during the developmental phase of a region, while Jones and Olken (2005) showed that increased growth rates are closely associated with strong leadership operating without institutionalised executive constraints. However, these studies were not extended to assess the economic development effects on a developed nation with mature institutions of democratically elected leaders who are able to exercise autocratic powers.

We contribute to the literature very positively by providing evidence from the economic development path of the Australian state of Western Australia at a point almost 150 years after settlement and when its political infrastructure was well established and mature. Examining Western Australian evidence, we shed light on the potential value of benevolent autocracy in overcoming institutional sclerosis (Olson, 1965), the resource curse (Sachs & Warner 2001), and federal overreach, within the democratic Australian federal system. Specifically, the effects of Sir Charles Court's premiership (1974-83) on the state's economic development trajectory suggest that a significant beneficial deviation in the growth of a developed economy becomes possible through increased facilitation of private capital in large-scale infrastructure by the autocratic shepherding of development contracts through regulatory and federal impedance.

Founded in 1829, Western Australia is an original state within the Australian federation. It was nicknamed the "Cinderella State" due to its lagging economic development during the Long Stagnation (1829 – 1889) as compared to its "sister" colonies on the eastern seaboard of the Australian continent (Gilchrist 2016). This description particularly emphasised Western Australia's insignificant economic outcomes as compared to those of Australia Felix; the fertile, compact and economically successful south-eastern corner of Australia principally comprising what became the states of New South Wales

and Victoria. Geographically, Western Australia covers about a third of the Australian continent yet contains only about ten percent of the federation's population in modern times. Its economic growth trajectory was very different to that of Australia Felix, marked by the Long Stagnation from 1829 and ending with the mining booms of the late 1880s and early 1890s (Gilchrist 2016). Reliance on agriculture and small-scale industry was not enough to alleviate the state's mendicancy and the political meddling tied to federal grants after the creation of the Australian Commonwealth instilled anti-centralist and anti-eastern states sentiments in the local population.

Western Australia's modern economic growth has been universally attributed to high levels of mineral exports resulting from several successive internationally-led mining booms following World War II (Harman & Head 1983, Alexander 1988, McLean 2004, Ye 2008, Maxwell 2018). The widely accepted narrative is that of a resource-rich region initially lagging in development in a nation with mature institutions—including democratic political institutions, enforcement of property rights and an effective common-law framework—that eventually stimulated economic growth through mineral exports to finally converge with the economic maturity of Australia Felix (Gilchrist 2011; Bunn and Gilchrist 2013). And, whilst the role of prominent individuals in the state's development has also been discussed (Layman 1982, Bolton 1983), the magnitude of the impact of these individuals in the context of their leadership style has not been quantified.

However, close examination of the historical events highlights the criticality of Sir Charles Court in his role as state premier, and particularly his 'benevolent autocratic' leadership style to the successful development of the state's minerals industry. We here define autocracy as the elected leader stepping out of the constitutional bounds that otherwise limit the behaviour of an executive, even if democratically elected. Benevolence in such autocratic behaviour can be argued when it is confined only to actions that benefit the state, not the individual executive or their cronies. Indeed, without Court's willingness to act outside of the established constitutional arrangements and to defy the Commonwealth government as well as to act independently of the parliament and his executive when he felt it necessary, it is unlikely that Western Australia would have developed either as

significant a minerals industry, or so soon; as discussed further below. Indeed, it was Sir Charles Court's influence as premier that ensured the creation of the economic break upon which we develop our analysis.

The application of the structural break test developed by Zivot and Andrew (1992) on Western Australia identified 1975 as the year of a significant upward economic structural break. Further analysis using the Synthetic Control Method (SCM) has shown the sustained break led to a 27% increase in GDP per capita. The curious timing of this structural break places it between two resource booms and the effect was unique to the state of Western Australia as compared to its sister states within the Australian federation. While the traditional historical teleology is described by reference to increased international minerals demand—that is, Western Australia had the right export materials at the right time—a thorough review of historic and political events at the time leads to the conclusion that the cause of this break is related to the policies and singular autocratic capacity of Sir Charles Court as Premier (1974-1983). In other words, the traditional teleology is really a description of the results of Court's contribution than of the cause of economic growth per se.

Court was celebrated for his influence on infrastructure and resource development but criticized for his parochial development agenda and autonomy in decision making. Through further analysis of the historical and political context at the time of the structural break, the aggregate effects of Court's premiership as a benevolent autocrat acting within a system of checks and balances can be partially quantified. This goes towards answering whether the mode of governance played a significant role in the successful utilisation of Australia's resource endowment, and opens the door to future research.

Specifically, we argue that Court's benevolent autocratic style—one that operated within, or was seen to operate within, the existing institutions; but which entirely disregarded those institutions when it was felt necessary (even those institutions related to the Australian constitutional settlement)—combined with Australian political pragmatism, was the combination needed to create the investment conditions necessary for the structural breakup to occur. Further, Court's earlier work

developing investor relationships internationally during his time as a State Minister in the Brand Government (1959-71), as well as during his leadership of the opposition party (1971-1974), both well beyond the constitutional jurisdiction of those offices, created the impetus that was subsequently realised during his first full year as Premier. Thusly, Western Australia managed to overcome the resource curse by building the institutional framework through both sound and non-distortionary economic policies that proved to be a very effective mechanism against the growth volatility that is prevalent in commodity-rich economies elsewhere in the world (Sachs & Warner 1999), and a leader able to bend the rules when they deemed it necessary. This outcome is often attributed to the capacity and existence of mature institutions within the state (Acemoglu et al 2004), but seldom is autocracy in the context of a developed state given such attention.

Our analysis demonstrates that the uniquely pragmatic political complexion of Australia combined with Court's autocratic tendencies, deployed in a benevolent style, was the combination of power and acquiescence needed to remove impediments to investment in mining and to increase the speed of economic development. As such, Western Australia constitutes an important case study in the context of the analysis of developed country analysis in terms of drivers of economic and institutional development.

This article is organized as follows: section 2 reviews the political and economic context of the structural break and section 3 focuses on the role of Court in Western Australia's development. Section 4 presents our identification of the structural break and section 5 discusses the identification strategy, the data and samples used, and explains the results and robustness checks. Section 6 concludes.

2 Background and Context

In this section, we discuss the national and local economic context, and the institutional context within which our analysis has taken place.

2.1 National Economic Context

Australia's economic progress was tumultuous in the period before the 1975 structural break largely owing to the global context. The international recession of 1973-75, caused by the oil crisis in

the Middle East and exacerbated by the collapse of the Bretton-Woods system, led to "stagflation" in the global economy and challenged the Keynesian fiscal multiplier theory then-dominant in Australia (Coleman 2016). As unemployment and inflation were both high, the standard levers used by policymakers and economists to stabilize the economy were ineffective and faith in the ability of governments to manage markets declined (Head 1986). This shift coincided with the movement towards economic rationalism that championed the role of market forces and private industry as stabilising the economy above government intervention and central planning.⁵

High levels of external public debt, foreign ownership of enterprises and an excessive reliance on imported technology underscored the dependent nature of Australia's economy (Harman & Head 1983). International trade liberalisation and post-World War II development in South-East and East Asia created high levels of demand for raw materials, especially iron ore, and created a parallel export industry for manufactured goods from these countries (Maxwell 2018). Australia's relatively low domestic manufacturing output and close geographical proximity ensured mutually beneficial trade with the region (Bolton 2008). However, a closely managed economy combined with federal government policies that restricted the sale of minerals and international investment (an exercise of power within the federal government's constitutional remit) were a significant barrier to the type of investment that would have facilitated Australia's capacity to exploit international demand for resources and achieve economic growth (For example, see Coleman 2016).

In terms of developed countries, the impact of increased demand for primary industry outputs drove the contraction of secondary industries, which were unable to compete with cheaper products from developing countries. This coincided with the establishment of the European Community and the United Kingdom's subsequent joining of that body in January 1973, leading to a significant reduction of UK trade with Australia, previously the major purchaser of Australian goods. The consequent loss of jobs associated particularly with a concomitant decrease in manufacturing activity also saw trade unions increase their resistance to lowering trade protection (Head 1986). In turn, this trade union

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⁵ For contextual analysis on Australia's economic liberalisation, see Head 1985.

activity impacted successive conservative governments' policy perspective in Western Australia regarding the difficulty of attracting international finance in an unsettled industrial climate. However, the antipathy to the economically and politically dominant Eastern States did not stop with disdain for the economic effects of union activity.

Due to its primary industry focus, Western Australia's economy has often performed countercyclically to that of the eastern seaboard. Specifically, in the global recession of the early 1890s and again in the 1970s, the Western Australian economic outlook was stronger due to the increased demand for primary industry outputs as compared to the lack of demand and increased protection that was experience in Victoria and New South Wales. However, the impact, particularly of protection, was that Western Australian primary producers and miners, who were consumers of the industry based in the Eastern states, had to pay higher prices for protected production, thus effecting a transfer of protection costs to Western Australian industry (Gilchrist 2016; Butlin 1994).

2.2 Local economic context

Economic policy guiding Western Australia's development after World War II continued to exhibit the 'frontier mentality' (Harman & Head 1983) coupling a sense of urgency in expansion with the view of nature as a harsh untamed wilderness of abundant resources — only to be overcome by sheer determination and 'nation-building' infrastructure projects. The pragmatic and materialistic political outlook remained with policy makers seeing the role of the state as a facilitator of private sector growth by socialising economic inefficiencies (e.g. rail transport pricing subsidies) and through the public provision of industry infrastructure (Gilchrist 2016; Butlin 1959). The split between Australia Felix and the less developed 'outer' states, which relied largely on primary industries and horizontal fiscal equalisation⁶ (Head 1986), fuelled the enduring anti-federalist and anti-eastern states bias.

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⁶ In Australia, states do not compete with each other in the way that they do in the US for example. Rather, a number of institutional arrangements have been established designed to give the federal government the capacity to effectively make transfers between states in order to re-balance the relative economic capacity of the states.

The dominant economic policy of successive state governments, being a commitment to 'balanced' development (an employment emphasis supported by government ownership), became outmoded as post-World War II movements of international capital towards industrial and resource development changed the objectives of the state government (Layman 1982). Failed industrial projects in the 1940s and 1950s provoked changes in the prevailing development ideology towards efficient growth, rather than increased employment. An enthusiasm for large-scale private capital was added, along with the rejection of government ownership, and 'bigness' became the new ideal (*ibid*).

It became understood that economic development required the creation of major industries to bring wealth and employment, as well as the benefits of multiplier effects, and that institutions could be developed after the industrial development had taken place—pragmatism dictated that the government should do whatever was necessary to create a strong economic environment regardless of the constraints imposed by the political institutional structure.

Additionally, Western Australia was eager to lose its long-held reputation as a "Cinderella" state dependent on federal handouts (Harman 1983). However, as the state government was unable to directly fund the rapid growth in new industries in the context of current fiscal capacity and, because any increase in royalties (or tax in general) would have produced an equivalent reduction in federal government payments related to fiscal equalisation measures (Layman 1982), this objective required private capital. In turn, this objective also forced the state government to forego higher resource royalties in a bid to attract multi-national companies and their investment capacity. The diffusion of economic benefits from mining for the state was based instead on the development of opportunities attracting international capital (Harman & Head 1983).

2.3 Institutional context

The effect of political actors, regimes and democracy on economic growth has been well developed in the literature (for example, see Przeworski & Limongi 1993, Hartmann and Spruk 2020). Typically, it would be expected that weak political institutions would lead to autocratic government, benevolent or otherwise, because the institutional constraints on individual leaders usual in a

developed democracy are not present or, if present, are not strong enough to restrain a leader inclined to act autocratically. Western Australia (and indeed Australia) presents a somewhat counter intuitive example in this context because Australian Political Pragmatism means that Australian democratic institutions, though mature and apparently very strong, are regularly subject to autocratic control. Such control can be benevolent (which we argue for Court) or malevolent. Predominately this pragmatism arises from Australia's colonial experience and the role allocated to government, as well as a general lack of understanding in the Australian population with respect to the county's political institutions (For example, see Butlin 1959; Gilchrist and Coulson 2015; Gilchrist 2016 & 2018; Coleman 2016)

The Australian constitutional settlement established a federation of sovereign states based on a modified version of the Westminster system of parliamentary government. Applying elements of the US presidential system (such as the justiciability of legislation), the Australian system negotiates multiple parliamentary sovereignties and the allocation of powers between jurisdictions, as well as guiding executive authority. Importantly though, the checks and balances within the Western Australian parliamentary system is subject to a significant degree of executive control; partly because of the pragmatic nature of the Australian polity and partly because the Westminster system itself matured as sovereign states like the original Australian colonies were also applying and maturing their parliamentary procedure (Gilchrist and Coulson 2015; Gilchrist 2016, 2018). Indeed, the combination of Australian political pragmatism as identified by Metin (1977[1901]) and the immaturity of the system allowed for the introduction of precedents in the Western Australian parliamentary system that supported the activities of an autocratic political leader.

Further, the parallel development of the parliamentary practice in Westminster itself with that of Australian parliaments combined with the inherent nature of these "sister" parliaments not to criticise each other for failing to maintain the checks and balances inherent in a parliamentary

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⁷ An example of a Western Australian premier with malevolent autocratic tendencies is that of Premier Brian Burke (1983-1988) (O'Biren 1986; McAdam and O'Brien 1987)

democracy (Gilchrist and Coulson 2015), ensuring that between election cycles political leaders could practice autocratic behaviours and undertake activities beyond their powers. We argue that Court was one such autocratic leader. However, several others are also extant in Australian history including Gough Whitlam (prime minister 1972-76) and Brian Burke (premier of Western Australia (1983-88). While Court was able to retire both Whitlam and Burke suffered for their autocracy (as many do) by being ejected from power – Burke was even briefly in prison for his transgressions (O'Brien 1986, McAdam and O'Brien 1987, Hocking 2009). A feature of Australia's pragmatic political system, whereby successful outcomes assume benevolence in leadership and warrants less application of the checks and balances, as well as less scrutiny from the public – as evident with Sir Charles Court. Self-serving behaviour (Burke), or a lack of perceived success by the demos (Whitlam), does not afford such luxuries.

As such, in this article, we argue that the premiership of Sir Charles Court was an example of benevolent autocratic leadership and that this leadership quality created the circumstances necessary for the 1975 structural break already identified. Court operated within the institutional parameters of the Western Australian democracy and the Australian federation when it positively supported his plans or, at worst, had a neutral impact. However, where Court's plans and priorities were potentially or actually placed at risk because of these institutional settings, he was prepared to operate outside of those arrangements in order to prioritise economic growth.

It is important to note that regulations were only overruled when it matched with his development agenda, not for reasons of individual gain or nepotism—that is, any autocratic action was intended to be, and arguably was, benevolent. The examples of autocratic leaders in the Australian context provided above also demonstrate that, where autocratic leaders are less concerned to work with those institutions that support their objectives or, more insidiously, simply use their power for gain, ultimately the Australian polity rejects them. While Court himself retired with a strong reputation—though his successor was not so lucky in that he was ultimately jailed for fraud in relation to his premiership (1982-1983) (Gregory and Gothard 2009). This is not an unremarked phenomenon.

For instance, Gandhi and Przeworski (2007) argue strongly on the importance of apparent institutional compliance for the survivorship of autocrats.

Finally, while the strong strain of pragmatism extant in the Australian political psyche provides leaders with the capacity to act outside of the political institutions, ultimately the ballot box is the point where the voters—the franchise was extended to universal adult suffrage in both houses in 1962 (Gregory and Gothard 2009)—are able to cast judgement on the actions of autocrats and democrats alike. It is also important to note that there were significant institutional, parliamentary and other governance frameworks within which Court operated.

Court has often been positively depicted as a strong leader personally driving Western Australia's economic development through large nation-building projects (Layman 1982, Bolton 1983, Head 1986, Harman & Head 1983) in spite of the fact that he "inherited the tradition that it was for the State government to provide the infrastructure for the development of industry" (Bolton 1983). He continued along this path, however he – as agent for the State – turned it to his benefit through clever deal-making. A chartered accountant by training, he personally negotiated mining rights with developers, often winning resource development contracts from other states (Head 1986). He was against the direct redistribution of rents, arguing that it would be unjust to those who have taken risks in developing the resources (Harman 1983) and was more interested in retaining low royalties in order to attract investment (Harman & Head 1983), resolute that growth would follow through the multiplier effect (Harman 1983). Project deals were approved through development agreements on a case-bycase basis, allowing flexibility in different contracts (*ibid*). Developers were required to build permanent communities though the state retained its traditionally accepted responsibility for the establishment of towns, ports, railways, schools, health and recreational facilities (Jamieson 2010).

Within the Australian political pragmatism context described above, Court was an autocratic State Premier. He respected institutional checks and balances but also used his strong leadership

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⁸ An example of this was the State's requirement for BHP to build a steel mill in Kwinana in order to gain access to iron ore in the Pilbara. This was based on Court's state development policy and undertaken despite the necessity to decrease the economies of scale initially intended for plant (Head 1985).

capacity to overcome what he saw as classical government failures associated with delays, inefficiency, and excessive formalism. His role as Premier, Treasurer and Minister for Co-ordination and Development, as well as his reputation developed during his time as a cabinet minister in the Brand government (1959-71) during which he was granted significant discretion, gave him the political capacity to run the state government autocratically.

In short, Court's economic philosophy was one of rapid expansion and development whereby the establishment of industry came first and institutions were left to develop organically afterwards. As Head (1983) outlines, the underlying strategy of development envisioned by Court in establishing a staples-based economy had three stages. Firstly, initial extraction and export of abundant resources was to lead to the diversification and stabilisation of the economy, which would lead to the state's economic autonomy in the second stage, and finally would culminate "in the export of local capital, skills and technology" (*ibid*). Thus, development was the fundamental goal as it would attract population growth through financial opportunity, leading to greater public and private welfare, as well as increased economic autonomy for the "Cinderella" state (Harman 1983).

Notwithstanding the maturity of Western Australian political institutions, Court was able to wield considerable power and was personally involved in many of the large project deals. However, whilst his autocracy facilitated the negotiation of major capital investment in the state, it also existed within the Australian federal institutional framework which Court was willing to subvert in the interests of economic development in Western Australia (Jamieson 2010). Court had the ability to overcome federal economic policy that was antithetical to the growth strategy he sought to employ. Other issues in his relationship with the federal government were also overcome, such as institutional sclerosis (Olson 1965) and classical public choice problems associated with bureaucratic inefficacy, such as the high transaction costs and persistence of federal policy bias. If the pragmatic approach of overcoming burdensome regulations to ensure agreements were to be seen as a form of corruption it would be confined to 'greasing' the wheels, not 'sanding' them (Leff 1964).

2.4 Transmission mechanisms

The uniqueness of the 1975 structural break in Western Australia helps rule out the false attribution of other narratives to explain the state's growth. The economic benefits of specific policies in trade legislation, horizontal fiscal equalization and other federal controls were experienced by other states to a comparable extent, and yet there was no similar upward structural break in growth. However, it is worth noting two pieces of legislation may have had a significant effect: The Trades Practices Act (1974), which further liberalised export policy; and, the Friendship and Co-operation Basic Treaty between Australia and Japan (1976). Again, whilst these were undoubtedly beneficial to the resource states, none of the other export states had the same economic gains from these policy settings despite the similar magnitude of resource exports (Head 1985).

An important facet of Sir Charles' political career was his relationship with Japan, which yielded a significant level of trust, likely facilitating cooperation. Court had expressed respect for the Japanese through his engagement with them in WWII and built strong ties with industry and government in his dealings with them. He was a professional accountant and served in WWII as a lieutenant from 1943-45, earning an Order of the British Empire in 1945 through his exemplary work in administration of the Japanese surrender. The head of Nippon Steel, Japan's largest steel manufacturer, said Court was "the one who fought and built the relationship between Australia and Japan" (Jamieson 2006: 157).

As the Japanese steel market entered recession in 1975, Australia was supplying 48 percent of Japan's demand for metallurgical coal and iron ore. This came largely from the 84 percent of Western Australia's total share of iron ore exports, but also from Queensland and New South Wales. Court was able to personally bargain with the heads of Japanese companies—notwithstanding a lack of constitutional capacity to do so in the context of the federal government's policy stance at the time (Jamieson 2010)—to maintain their agreements with Western Australia during this downturn, whereas Queensland repurposed its coal for domestic use in the face of decreased exports.

The effect of the horizontal fiscal equalization process and other federal policies impacted states differently. The federal government influenced the trade agreements of the states via its policies

and legislative program: setting minimum export prices for several commodities during the 1970s; legislating environmental impact assessment procedures from 1974; and setting acceptable foreign equity levels through the federal control of foreign capital inflow (Head 1985). While a change in federal government in 1975 decreased intervention in state resource development agreements briefly, reforms to tax-sharing arrangements in 1976 (Head 1985) and the 'New Federalism' policies extended federal overreach even further.

The federal Minister for Minerals and Energy from 1972 to 1974, R. F. X. Connor, under the leadership of Gough Whitlam⁹, sought to harness the North-West Shelf liquefied natural gas (LNG) deposits for national use. Court, as opposition leader of the State Government since the loss of the 1971 state election, successfully resisted the effort; despite the state Labour government in power at the time being partial to the idea. Instead, under Court's leadership in expanding the state role of facilitating capital investment in 1978, the Western Australian Government successfully persuaded the Commonwealth to amend Loan Council guidelines to raise sufficient capital for the Pilbara-Perth pipeline. He eventually negotiated an agreement in 1981 to allow the establishment of a state-owned pipeline from the Pilbara to Perth (1600km), costing \$A930 million (Alexander 1988: 121-4). The first export of LNG to Japan in only occurred in 1989 and has granted Western Australian industry a significant energy advantage through its domestic gas reservation policy.

Finally, Court's staunch anti-union stance likely contributed to a rigorous industrialization effect on growth. The tumultuous economic circumstances of the time increased union action nation-wide and Court's dominance of the political establishment enabled him to legislate to suppress protests and unions via excessive anti-protest legislation, which made it illegal for more than three people to meet publicly without prior police clearance (Jamieson 2010). Whilst anti-protest efforts were similarly aggressive in Queensland, a state with comparable economic reliance on resources and led by right-wing populist leader Bjelke Petersen between 1968 and 1987 (Mullins, cited in Head 1986),

⁹ Later removed from office by the Governor General in a constitutional crisis.

these were not as effective—underscoring the significance of Court's ability and preparedness to sidestep institutional norms in a modern, developed democratic state.

3 Identification Strategy

As stated, our goal is to examine the impact of Court's policies on economic growth in Western Australia. To do this, we have constructed the trajectory of Western Australia's economic growth in the hypothetical absence of Court's administration and its policies allowing us to create a counterhistorical trajectory that, in turn, permits us to analyze the impact of Court's policies and leadership. To this end, we need a control sample showing how the economic growth trajectory would evolve in the hypothetical absence of Sir Court and his leadership. Since an exact control group does not exist, our strategy is to create a synthetic control group (in effect, a synthetic country made up of the attributes of countries similar in nature to the attributes of Western Australia) that is able to reproduce the growth trajectory of Western Australia had Court not been elected. Hence, since none of the regions and countries in the control group had Court as their leader, the synthetic counterfactual scenario should reflect the direct effects of the election of Court as the state premier on Western Australia's economic growth trajectory.

We estimate the effect of the Court administration on economic growth by applying the synthetic control estimator (Abadie and Gardeazabal 2003, Abadie *et al.* 2010, 2015, Cavallo *et al.* 2010, Billmeier and Nannicini 2013, Grier and Maynard 2016) to construct a counterfactual growth trajectory in the hypothetical absence of Court's election to the Western Australian premiership. Our key identifying assumption is that the synthetic control group is able to reproduce Western Australia's growth trends to serve as a reliable source of a counterfactual scenario for what the growth trajectory would have been in the absence of Court.

Our synthetic control setup establishes Western Australia as a single-treated state compared with the rest of the world which was not impacted by Court in power. More formally, suppose we observe J+1 countries, where Western Australia is denoted as j=1 region affected by the election of Court, while J-1 represents the control group of countries that serves as a donor to capture Western

Australia's pre-Court growth and development trends as a reliable proxy to construct the counterfactual growth scenario. Let $y_{i,t}^N$ denote the per capita income of Western Australia in the absence of Court and suppose that T_0 represents the number of years before the election of Court, whereby $1 \le T_0 < T$. By contrast, let $y_{j,t}^I$ denote the per capita income of Western Australia in the full post-Court period starting at $T_0 + 1$. Our second identifying assumption is that the election of Court has no effect on economic growth in the pre-treatment period, and as such, does not contaminate the counterfactual scenario with pre-existing trends. This implies that we have $y_{j,t}^N = y_{j,t}^I$ for all $t \in$ $\{1, \ldots, T_0\}$ and $j \in \{1, 2, \ldots J\}$.

The per capita income in *j*-th country at time *t* is given by:

$$y_{j,t} = y_{j,t}^N + \lambda_{jt} \cdot 1[j = 1, t > T_0]$$
 (1)

where $1[j = 1, t > T_0]$ is a simple binary function indicating whether j-th country is exposed after the period \mathcal{T}_0 to the election of Court. The full impact of the Court administration on Western Australia's economic growth trajectory is then given by:

$$\lambda_{1t} = y_{1t}^I - y_{1t}^N = y_{1t} - y_{1t}^N$$
 (2)

However, notice that y_{1t}^I is typically unobserved by econometricians which implies that the counterfactual growth trajectory, denoted by y_{1t}^N , has to be estimated to obtain a consistent representation of λ_{1t} . Consider a $J \times 1$ vector of weights $\mathbf{W} = (w_2, \dots, w_{J+1})$ such that $w_j \ge 0$ for all $j=2,\ldots,J+1$ with an additive structure implying that $w_2+\ldots+w_{J+1}=1$. Each particular value of the vector represents a country-level weighted share¹⁰ of the total for Western Australia's synthetic control group. The latter represents the weighted average of outcome-level and covariate-level pre-Court growth characteristics that best reproduce the growth trajectory of Western Australia. Hence, the reweighted per capita income that approximates the counterfactual growth trajectory is given by:

¹⁰ We replicate the analysis with regional level data for robustness as described later. The results are qualitatively the same.

$$\sum_{j=2}^{J+1} w_j \cdot y_{j,t} = \eta_t \sum_{j=2}^{J+1} w_j \mathbf{Z}_j + \pi_t \sum_{j=2}^{J+1} w_j \, \mathbf{M}_j + \sum_{j=2}^{J+1} w_j \varepsilon_{j,t}$$
 (3)

Where $\mathbf{W} = (w_2, \dots, w_{J+1})$ is the approximate characterization of Western Australia's growth trajectory in the hypothetical absence of Court's election for the period $t > T_0$, \mathbf{M}_j is the vector of unobserved factor loadings, and \mathbf{Z}_j is the vector of covariates. Hence, the overall effect of Court's election on Western Australia's economic growth is given by:

$$\tilde{\lambda}_t = y_{1t} - \sum_{i=2}^{J+1} w_i^* \cdot y_{j,t}$$
 (4)

If the pre-Court election growth characteristics and trends of the synthetic control group are sufficiently well matched with Western Australia, the underlying fit between it and its synthetic control group will capture the parallel growth trend before the election of Court. Our synthetic control implementation procedure is similar to Abadie and Gardeazabal (2003) and Abadie *et al.* (2010). Since each value of **W** represents a weighted covariate-level average of the control group without being exposed to the election of Court, let **X** denote a vector of covariates. Such a weighted average is a convex combination of the outcomes and covariates of unexposed countries inside the convex hull that minimizes pre-Court-election prediction error and ensures that $w_2 + \ldots + w_{J+1} = 1$. The choice of weights can be somewhat arbitrary and may come at the expense of extrapolation. Our approach to partially address the issue of arbitrariness of weights is to perform a nested Newton-Raphson optimization route to find the best fitting synthetic control match for Western Australia. More specifically, we build a vector of **W*** weights to minimize the discrepancy in per capita output between Western Australia and the countries in the control group, denoted by $||X_1 - X_0 W||$ subject to $w_2 > 0$ and $w_2 + \ldots + w_{J+1} = 1$. An obvious choice for the distance minimization would be to compare the outcome values for the full pre-Court-election period, namely $y_0^{K_1}, \ldots, y_0^{K_M}$ and $y_1^{K_1} = y_{l1}, \ldots, y_l^{K_{T_0}} = y_{l2}, \ldots, y_l^{K_{T_0}} = y_{l2}, \ldots, y_l^{K_{T_0}}$

¹¹ Following Ferman et. al. (2019), we build several synthetic control specifications and estimate the impact of Sir Court's administration on economic growth with several different specification to address the possible lack of fit in the pre-treatment period between Western Australia and its synthetic control group. By following the proposed guidance, we choose the specification with the lowest p-value to minimize the discrepancy between the treatment and control samples. In particular, we focus on the specification that combines pre-treatment first and second lag of the outcome with auxiliary covariates where the p-value of a test that uses the mean of the RMSE statistics across specifications is less than 0.05 to elicit a plausible growth effect of Sir Court.

 y_{iT_0} . Instead, to address the discrepancy between X_1 and X_0W , we use a positive and symmetric semidefinite matrix as a linear combination of pre-Court outcomes and covariates as recommended by Abadie *et al.* (2010):

$$||X_1 - X_0 W||_V = \sqrt{(X_1 - X_0 W)'V(X_1 - X_0 W)}$$
 (5)

where ${\bf V}$ is the symmetric semi-definite positive matrix. Since the relationship between economic growth and the full set of covariates is unlikely to exhibit non-linearity, the set of penalty terms for expanding covariates and outcome distance is low. We further tackle the predictive discrepancy in outcome and covariates by restricting the control group to those countries and region that are very similar to Western Australia in terms of ${\bf X}_1$ matrix. Such cross-validation procedure is based on minimizing the mean squared error of the synthetic control estimator which ensures that the synthetic counterfactual approximates the long-run growth path of Western Australia over time in the full pre- ${\bf T}_0$ period before the structural break.

4 Data

Our dependent variable is per capita GDP denoted in 1990 Geary-Khamis dollars using multiple benchmark method for the period 1950-2016 (Bolt *et al.* 2018). We match Western Australia's per capita GDP series for the same period with the country-level control sample using the regional GDP per capita data from Gennaioli *et al.* (2014). Our list of long-run growth covariates consists of (i) pre-Court premiership GDP per capita dynamics, (ii) physical geography covariates, (iii) demographic covariates, (iv) legal history covariates, and (v) pre-premiership institutional quality covariates.

We proxy pre-election GDP per capita dynamics by using two lags of the pre-1975 GDP per capita which embeds a dynamic panel-level regression (Arellano and Bond 1991, Maseland and Spruk 2020) into the synthetic control setup. We also add the level of per capita GDP in the initial year and the last year before the election of Court. The set of physical geography covariates (Nunn and Puga 2012) comprises latitude, longitude, size of the land area, island, desert and landlocked indicators. The demographic covariates comprise population size, population density per square km, and population

growth rate (Maddison 2007, Census Bureau 2016). Since these variables are closely related to our dependent variable and might violate the treatment effect of Court on the Western Australian growth trajectory, we average each variable over 1950-1974 period to partially address standard confounding issue that could affect the counterfactual growth dynamics. The data on the legal history from La Porta *et al.* (1998) is used to capture the contribution of distinctive legal history to long-run growth, while the set of institutional covariates consists of the level of democracy proxied by Polity score (Marshall *et al.* 2016) since this is one of the more reliable data series capturing broad institutional similarities between Western Australia and the rest of the world. In total, our sample consists of 103 countries ¹² for the period 1950-2016. *Table 1* reports the covariates means between Western Australia and the rest synthetic model. As can be seen the models match closely in panels A and D (income and geography), with only some matches in panels C and D (demographic and legal history).

Figure 1 presents the path of economic development of Western Australia compared to the rest of Australia. Prior to the 1975, the Western Australian GDP per capita was at the same level as the country-level average; but, as can be seen by the graph, it tends to depart significantly upward after 1975. Notice that the gap between Western Australia and the rest of the country tends to increase for the entire period after the structural break. Figure 2 depicts the path of economic development of Western Australia against the paths of other countries in the control sample. Compared to the rest of the world, Western Australia enjoyed a high level of affluence and development in 1950 but when compared to other countries, it lagged behind in the top ladder of the sample of world income distribution. This gap exhibited a persistent tendency until 1975, after which the Western Australian per capita GDP gap, with respect to the top percentiles, narrowed down with clearly perceptible evidence of it evolving around the years after the structural break.

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¹² Albania, Argentina, Austria, Bangladesh, Belgium, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cameroon, Canada, Cape Verde, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Germany, Ghana, Greece, Guatemala, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kosovo, Lebanon, Luxembourg, Macedonia, Madagascar, Malaysia, Malta, Mauritius, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nepal, New Zealand, Nicaragua, Nigeria, Norway, Oman, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Syria, Thailand, The Netherlands, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Kingdom, United States, Uruguay, Venezuela, Vietnam, Zambia, Zimbabwe

Table 1: Covariate Balance in Country/State-Matched Sample

	Western Australia	Synthetic Western
		Australia
Panel A: Pre-Court per capita income covariates		
Log GDP per capita in 1950	9.45	9.46
Log GDP per capita in 1960	9.60	9.58
Log GDP per capita in 1974	9.91	9.92
Log GDP per capita(t-1)	10.16	10.08
Log GDP per capita(t-2)	10.18	10.03
Average growth rate(1950-1974)	1.001	1.002
Panel B: Physical geography covariates		
Latitude	-26.67	1.78
Longitude	121.62	33.60
Landlocked	0	0.04
Island	0	0.44
Desert	10.88	0.306
Log size of the area	14.78	14.17
Panel C: Demographic covariates		
Log population size	6.68	9.78
Log population density	1.005	1.204
Population growth (1950-1974 average)	1.001	1.002
Panel D: Legal history covariates		
British common law	1	0.99
Civil law	0	0.01
Polity2 (1950-1974 average)	10	9.79

Figure 1: Western Australian GDP in the Australian Perspective

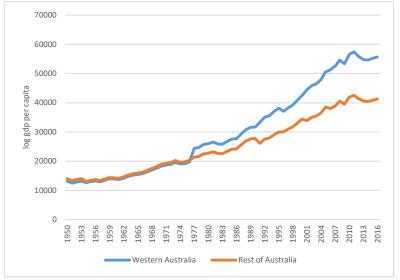


Figure 2: Western Australian GDP Per Capita in the International Perspective

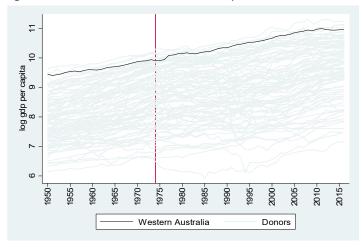


Table 2 reports the covariate balance between Western Australia and other regions using the sample of 687 regions from 32 countries¹³ in the period 1950-2016, as a control sample. Again, synthetic pre-Court income and legal origin covariates match closely, whilst some geographic covariates also match. Given a low predictive discrepancy between the real Western Australia growth trajectory and its synthetic version with RMSE = 0.031, we are able to match the treated state with its synthetic control group reasonably well to rule out the extant possibilities of pre-1975 trends that could affect the counterfactual growth dynamics. That said, Western Australia mimics the growth and development of the synthetic control group sufficiently enough to approximate the hypothetical economic growth trajectory in the absence of Court's leadership, which we interpret (in light of historical and policy analysis) as a reflection of the direct effect of Court's election and the subsequent state-level public policies on economic growth.

Table 2: Covariate Balance in Region-State Matched Sample

	Western Australia	Synthetic Western Australia
Panel A: Pre-Court per capita income covariates		
Log GDP per capita in 1950	9.48	9.41
Log GDP per capita in 1970	9.60	9.60
Log GDP per capita(t-1)	9.59	9.59
Log GDP per capita(t-2)	9.59	9.59
Panel B: Physical geography covariates		·
Island	0	0

¹³ Argentina, Austria, Belgium, Bosnia and Herzegovina, Brazil, Canada, Chile, Colombia, Croatia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Macedonia, Mexico, Netherlands, Norway, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States, Uruguay, Venezuela

Capital city	0	0.37
Altitude	25	12.96
Temperature	18.7	16.64
Rainfall	807	1112
Sunshine	3209	2673
Latitude	-31.95	22.27
Longitude	11.85	-77.23
Landlocked	0	0.38
Panel C: Legal traditions covariates		
German	0	0
Iberian (first cluster)	0	0.06
Iberian (second cluster)	0	0
Iberian (third cluster)	0	0.08
Nordic-Russian (Scandinavian cluster)	0	0
Nordic-Russian (non-Scandinavian cluster)	0	0
English	1	0.86
Turkish	0	0
French	0	0

5 Results

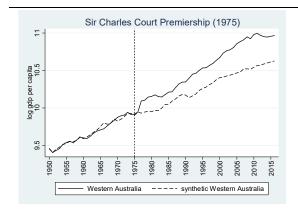
5.1 Baseline estimates

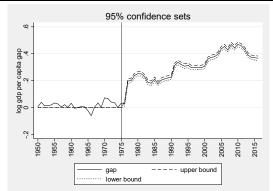
Figure 3 displays the synthetic control estimated impact of Court's premiership on the economic growth trajectory of Western Australia. The evidence readily suggests that the real Western Australia outperforms its synthetic version considerably. The positive per capita income gap points out the beneficial effects of the Court administration on the state's path of economic growth. In quantitative terms, the per capita income of the actual Western Australia in the last year of our sample period (i.e. 2015) is 36 percent higher than the per capita income of its synthetic control group. Notice that the predictive discrepancy between the real Western Australia and its synthetic control group prior to the election of Court is very low with the root mean square prediction error of 0.027 which appears to be within the acceptable boundaries (Adhikari and Alm 2015). Panel (b) exhibits the estimated per capita GDP gap in response to the economic policies of Court administration along with the 95% confidence bounds (Firpo and Possebom 2018). The evidence suggests that both the upper and lower bound of the post-1975 per capita GDP are very narrow and do not depart substantially from the baseline effect for the full-post treatment period, confirming both the uniqueness and likely significance of the growth effect.

Figure 3 Economic Growth Effects of Court Premiership



(b) Post-Court GDP per capita gap with Firpo-Possebom 95% Confidence Bounds





The overall impact of the Court administration on Western Australia's economic growth trajectory is characterized by two distinctive features. First, the positive per capita income gap arising after the election of Court is easily perceivable, apparent and immediate, whereas the gap between the real Western Australia and its synthetic control group in the pre-1975 period is almost nonexistent. This suggests that the gap between the real Western Australia and its synthetic peer is not driven by the lack of fit or pre-existing trends. Furthermore, the estimated per capita income gap between Western Australia and its control group exhibits a persistent rise over time. This pattern indicates that the election of Court and the subsequent government administration mimics the characteristics of the structural breakup in the growth trajectory. The government administration and policies of Court appear to be a structural breakup, with a permanent change of the state's long-run growth equilibrium, rather than with a temporary short-lived impact. Our evidence reflects the beneficial growth effects of the government administration with a growth-friendly policy set in contrast to the negative, temporary or non-existing effects of government administrations elsewhere. For comparison, our results starkly contrast the weak or even negative effects of the Chavez administration on Venezuela's development trajectory (Grier and Norman 2015); a country that also benefitted significantly from resource endowment.

Figure 4: The Composition of Synthetic Control Group for Western Australia

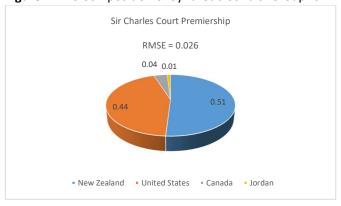


Figure 4 displays the composition of Western Australia's synthetic control group when matched at the country level. The synthetic control group consists of the set of countries with an additive weight structure, whose growth and development trajectories fall within the convex hull of the matrix that best reproduces Western Australia's growth trajectory but did not undergo the similar policy intervention. Given a relatively low RMSE at 0.026 (2.6%) of the pre-treatment error margin, the ability of the synthetic control group to capture and reproduce the growth path of Western Australia prior to the election of Court is, in our view, both feasible and does not invoke the issues of poor fit or large predictive discrepancy that would otherwise render the estimated counterfactual scenario questionable. The synthetic control group for Western Australia in pre-Court period consists of New Zealand (51%), United States (44%), Canada (3%), and Jordan (1%), respectively. Since none of these countries had Sir Charles Court in power, nor benefited from his deals; however, were also subject to the same global pressures, we interpret it as a plausible characterization of Western Australia's growth trajectory in the hypothetical absence of Court.

One of the questions that arises immediately from the synthetic control estimated impact of the Court administration on Western Australia's economic growth trajectory concerns the differential trend assumption. Namely, has the election of Court specifically led to the statistically significant change in the growth trajectory trend slope compared to the pre-Court-premiership period? To answer this: if the onset of the Court administration led to a perceivable gap in per capita income, one should be able to detect a statistically significant change in the slope of the estimated per capita income gap.

Following Spruk and Kovac (2020), we test the differential trend assumption in response to the premiership of Court. In particular, we examine whether the ascent of Court to power produced a statistically significant change in the per capita income gap slope line in the post-election period relative to the pre-election period. *Figure 5* compares the estimated gap trend lines before and after the premiership of Court. The evidence suggests a rather strong and highly perceivable change in the gap trend in the post-election period. Prior to the rise of Court to the state premiership, the gap slope coefficient is 0.003 with the p-value = 0.51 which rules out any perceptible pre-election trends as a potential confounder of the estimated counterfactual growth dynamics. By contrast, the coefficient on post-Court gap slope is 0.007 and statistically significant at 1%. This implies that the premiership of Court is associated with an acceleration in the growth trajectory by 0.7 percentage points relative to the synthetic control group.

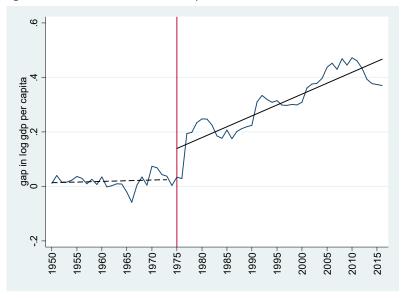


Figure 5: Differential Trend Assumption Test of Court Administration Growth Impact

Our differential trend estimates imply that at the long-run rate of growth of 2 percent, the half-life period to double the per capita income drops from 36 years to 26 years, suggesting that the estimated effect of the Court premiership is associated with a marked reduction in Western Australia's half-life adjustment period. The Wald test on the equality of pre-Court-administration and post-Court-administration gap slope lines using a linear combination yields the t-test = 7.12 with the

corresponding p-value = 0.000. In a similar vein, a Chow test on the structural break in the gap trend line in the post-election period yields a p-value = 0.000, which further confirms the economic significance of the structural break posited by the premiership of Sir Charles Court for Western Australia's long-term growth trajectory.

5.2 Inference on the long-term growth impact of the Court Administration

Our approach to assess the statistical significance of the estimated per capita income gap induced by the election of Court is to ask whether the estimated gap is driven by chance and may possibly reflect internal changes or external shocks that can be distinguished from the proposed structural break itself. If the estimated gap is driven by chance or other perceivable external or internal shocks, the estimated per capita income effect would also be obtained if we had randomly selected any country from the donor pool to study the growth impact of the Court administration. Thus, the question of whether chance pervades the estimated growth gap triggered by the election of Court can be readily answered by using a battery of placebo tests.

By adopting the framework of Abadie and Gardeazabal (2003), Bertrand *et al.* (2004) and Abadie *et al.* (2010, 2015), we run a series of placebo tests by running the synthetic control estimator on the countries that did not have Sir Court in power. The intuition behind such an in-space placebo study is that if these placebo runs produce per capita income gaps that are similar to Western Australia, then there is some commonality in the trend and it is unlikely that our analysis provides evidence in support of the significant growth effect of Sir Court's administration. Alternatively, if the gap estimated for Western Australia is perceptible large and rather unique compared to placebos, then our interpretation is that the analysis of the growth impact of the Court administration provides evidence supporting the notion of the administration's significant influence on the growth trajectory of Western Australia.

Our in-space placebo analysis proceeds by iteratively applying the synthetic control estimator to every untreated country in the donor pool. Each iteration shifts Western Australia to the donor pool and treats each potential control country as if it had the benefit of Court's as a benevolent autocratic

leader in 1975. Computing the placebo effects from consecutive runs yields the distribution of in-space growth effects of Court's administration for the full pre- and post-treatment period. Suppose that the growth effect of the Court premiership is described by $\hat{\alpha}_{1t}$, and that the distribution of placebo runs is characterized as $\hat{\alpha}_{1t}^{Placebo} = \{\hat{\alpha}_{jt} : j \neq 1\}$. Hence, we compute the two-tailed probability that the effect of Court's premiership is driven by chance as follows:

$$P[\hat{\alpha}_{1t}] = Pr(|\hat{\alpha}_{1t}^{Placebo}| \ge |\hat{\alpha}_{1t}|) = \frac{\sum_{j \ne 1} 1 \cdot |\hat{\alpha}_{jt}| \ge |\hat{\alpha}_{1t}|}{J}$$
(6)

The general thrust of the in-space placebo test is that when a certain shock or intervention of interest is randomly distributed across the sample, the placebo distributions provide for a classical randomization inference. But since the election of Court is clearly not randomly distributed across our sample, and may thus not fully satisfy the strict exogeneity requirements, our interpretation is that the associated p-value represents the proportion of countries whose estimated quasi-effect of Court's administration is at least as large as the estimated per capita income gap of Western Australia. To avoid artificially inflated p-values, we remove the placebos that arise from the poor pre-Court fit, since these may not be well matched by the set of pre-1975 outcomes and covariates. In doing so, we restrict the set of placebo effects to include only those that match well. By following Abadie et al. (2010), this means that large multiples of placebo effects relative to the one obtained for Western Australia are excluded from the in-space placebo distribution. Hence, the placebos that are four times larger than the one obtained for Western Australia are dropped from the analysis and thus do not play any role in the computation of the p-value to assess the statistical significance of the Court administration growth effect. We also adjust the placebo gaps by the pre-1975 match quality parameter to construct a reasonably reliable distribution of t-statistics and associated post-treatment p-values.

Figure 6 presents the in-space placebo gaps with the associated p-values of the treatment effect of Sir Charles Court. The evidence suggests that post-1975 per capita GDP gap of Western Australia appears to be unusually large and exceptional compared to the distribution of placebos. In particular, Western Australian per capita GDP gap is exceptional since the pre-1975 gap is

imperceptible from zero while the post-1975 gap appears to be relatively large with a clearly perceivable structural break posited by the election of Sir Charles Court. Panel (b) displays the distribution of p-values for the full post-treatment period. A reasonably large, immediate and permanent growth impact of the Court administration becomes apparent from the intertemporal comparison of p-values in the post-1975 period. In particular, the p-values on the treatment effect of the Court administration on Western Australia's growth trajectory are consistently below the conventional 5% threshold across the entire spectrum of post-1975 period. In particular, the impact of the Court administration on the growth trajectory becomes significant after the third year of the post-1975 period, which coincides with his election. Moreover, the p-values do not exhibit the tendency of upward reversal that could, at least potentially, render the growth impact of the Court administration a temporary policy shock instead of a permanent breakup. By the end of our sample period, the fraction of countries with the similar post-1975 gap magnitude is low, at 0.037, which implies that the estimated per capita GDP gap most likely reflects the growth effect of the election of Sir Charles Court, whereas pre-existing trends are an unlikely confounder of the counterfactual growth scenario.

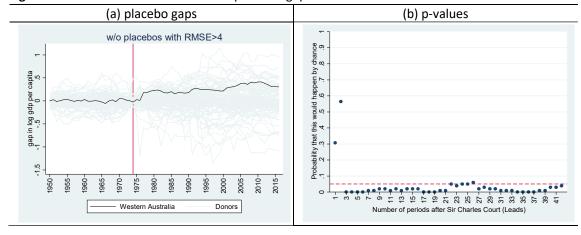


Figure 6: Placebo Distributions of Per Capita GDP gaps

5.3 Region-level analysis

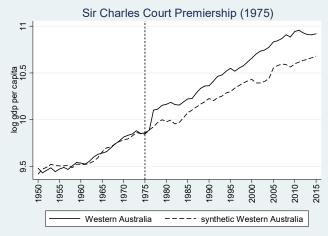
One caveat that arises with respect to the plausibility of the estimated per capita income gap concerns the mismatch in the level of aggregation. Namely, since Western Australia is a state within the Australian federation, comparing it with regions in other countries that potentially have similar

pre-1975 characteristics of growth trajectory may be seen as confounding the differences between the two.

To this end, we build the annual sample of 687 regions from 33 countries within the same period (i.e. 1950-2015), relying of Gennaioli *et al.* (2014) benchmark estimates, and match Western Australia with other regions based on the same set of past per capita income levels, physical geographic covariates and legal traditions (Garoupa *et al.* 2020), and set out to replicate the counterfactual scenario from a country-level sample. By synthetically matching Western Australia with other regions, we are again able to estimate the counterfactual scenario in response to the election of Court, this time by seeking similar regions as a basis to construct a control group.

Figure 7 displays the region-level estimate per capita income gap in response to Court's premiership. Compared to the baseline estimates, the long-term growth impact of the Court administration on Western Australia is even larger. In quantitative terms, the actual Western Australia in the last year of our sample period is 27 percent richer than its synthetic version when using regional data. Since the predictive discrepancy between the actual and synthetic Western Australia is very low prior to 1975 (i.e. RMSE = 0.031), our interpretation is that it is unlikely that pre-existing trends arising from either internal or external shocks (other than the election of Court) confound the counterfactual scenario. After 1975, the growth trajectory of Western Australia departs substantially from its synthetic control group, with the tendency of a slowly rising per capita income gap. The region-level synthetic control group that best reproduces the growth trajectory of Western Australia consists of the combination of US states and two South American provinces. More specifically, the synthetic region-level counterpart of Western Australia consists of the weighted combination of growth characteristics of Florida (49%), Washington D.C. (38%), Canelones/Uruguay (8%), and Magallanes y Antarctica Chilena (6%), respectively.

Figure 7: Economic Growth Effect of Sir Court Premiership with Region-Level Control Sample



One potential qualm that might arise from the estimated region-level per capita income gap is related to the legal institutional background of the states and regions that constitute the control group for Western Australia. Taken together, the combined share of USA states in the control group amounts to 87 percent, which might suggest that the counterfactual scenario is represented by the states from a very similar common law jurisdiction that could have undergone a comparable policy change to of Western Australia. Any innate reliance on the USA states to provide a plausible characterization of Western Australia's growth trajectory might raise the question as to whether the estimated per capita income gap is conflated by the trends of the USA states alone to a disproportionate degree.

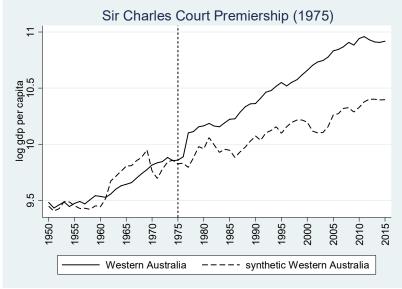
Albeit imperfectly, we partially address these issues by examining the susceptibility of the per capita income gap to the composition of the synthetic control group regarding the institutional background of the donor states. To do so, we exclude the regions from all common-law jurisdictions from our sample (i.e. United States of America, United Kingdom, Canada) and replicate the counterfactual scenario in response to the Court premiership using non-common law jurisdictions as a donor pool to construct the synthetic control group.

Figure 8 presents the per capita income gap in response to the Court administration using regions from non-common law jurisdictions as a control sample. The estimated per capita income gap jumps from +31 percent in the full regional control sample to +67 percent in the non-common law regional control sample. The estimated gap seems to be large and has a clear upward trajectory over

time. The economic growth trajectory of Western Australia prior to 1975 is best approximated as a linear combination of Copenhagen (21%), Quintana Roo (21%), Magallanes y Antarctica Chilena (21%), Basel Stadt (18%), Buenos Aires City (8%), Louisiana (6%), Estado Zulia (4%), and Rio de Janeiro (<1%). The synthetic control group yields a reasonably low RMSE (0.094) with clearly perceptible evidence of the structural break between the actual Western Australia and its synthetic control group that evolves around the year of Court's election to state premiership. The estimated per capita income gap does not seem to be susceptible to the sample composition.

By removing the regions from common-law jurisdiction, the underlying effect of the Court premiership is substantially larger and, yet, still statistically significant at 5% across the full post-treatment period in both respective cases. When states from common-law jurisdictions are dropped from the donor pool, the synthetic control group for Western Australia consists of the regions enjoying similar level of per capita income and development (Basel Stadt, Copenhagen, Louisana) and geographically similar regions (Quintana Roo, Estado Zulia, Magallanes y Antarctica Chilena, Buenos Aires City, Rio de Janeiro).

Figure 8: Economic Growth Impact of Sir Charles Court



6 Conclusion

In this article, we examine the economic consequences of autocratic leaders in the context of mature democratic institutions—that is, how autocracy in the context of a mature democracy can drive economic growth. To this end, we exploit a unique event of Sir Charles Court's State Premiership of Western Australia in 1975 to estimate the contribution of an autocratic state premier to economic growth. We hypothesised that an autocrat or dictator may not necessarily act as a brake on economic development provided that discretion does not translate into corrupt practices, abuse of power for personal gain, and cooptation with specific interest groups that traditionally protected their interests vested in the current production process—that is, a benevolent rather than a malevolent dictator. We extended this hypothesis further to claim that autocratic leaders may actually foster an improved economic growth trajectory provided that the leader's autocratic discretion is used to overcome public administrative failures that act as a brake on economic development.

We argue that Court's premiership marked the leader's increased use of autocratic practices in pursuit of an active industrial development policy, adoption of trade treaties with Asian countries such as Japan, and the suppression of the interest groups that acted as a brake on economic growth such as labor unions, and federally mandated tariffs, whilst maintaining an impartial and reasonably high level of the policymaking by the government administration, and som respect for the legislative and judicial branch of state government.

To assess the effect of Court on Western Australia's economic growth trajectory, we build a counterfactual scenario and approximate the state's growth trajectory in the hypothetical absence of Court as state premier. By deploying the synthetic control estimator (Abadie *et al.* 2015), we reproduce Western Australia's growth trajectory by relying on the pre-1975 growth and development trends in a control sample of 102 countries and replicate this with another control sample of 687 regions from 33 countries for the period 1950-2016. By matching Western Australia to other countries and regions with similar growth trajectories and development characteristics, we find that the synthetic control group is able to reproduce Western Australia's growth trajectory with very few predictive discrepancies prior

to the election of Court, yielding a pre-1975 mean prediction error that is within the acceptable range advocated by the extant synthetic control literature. By and large, the synthetic control groups for Western Australia largely consist of US states, rich European regions and, to a smaller degree, a few South American provinces and Middle Eastern countries that have similar pre-1975 growth and development trajectories.

Our estimates imply that the synthetic, or counter factual, Western Australia would have had significantly lower per capita income down to the present day. More specifically, Western Australia's per capita GDP is 27 percent higher (35 percent at the regional-level comparison) than the level of the synthetic control group in the last year of our sample (i.e. 2016). The estimated gap appears to have increased markedly over time, which testifies to the structural growth breakup induced by the premiership of Court. By assigning the first full year of Court's governance to other countries that were not affected by the election, we are able to determine whether the economic growth effect of Court is driven by chance alone. A series of randomization-based permutation tests confirm that the estimated per capita GDP gap in the post-1975 period appears to be highly specific to Western Australia and is not perceivable in other countries. By assessing the economic growth performance of Western Australia in response to Court's leadership against other regions, we show that the estimated per capita GDP gap appears to be very stable. Court's administration on Western Australia's economic growth trajectory appears to have had profound and long-lasting economic implications. Our research shows that the use of increased executive discretion within the federal system of checks and balances will not necessarily produce corruption and rent-seeking, provided that autocratic leaders, of which Court was one, act in the interests of the state and use that discretion to overcome government failures and interest group pressure that act as a barrier to economic growth and development that could otherwise lead to institutional sclerosis and economic stagnation.

Our discussion leaves room for several other possible non-economic considerations about autocratic governance that are beyond the scope of our analysis. The example of Western Australia under Court shows that autocratic governance can lead to sustained economic growth but, at the same

time, does not endorse the notion that all autocratic styles lead to economic growth. The distinction between the case of Western Australia under Court and others lies in the contextual institutions, especially a strong parliamentary tradition coupled with Australian pragmatism.

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