

SOVEREIGN WEALTH FUNDS 2020

FIGHTING THE PANDEMIC, EMBRACING **CHANGE**

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PREFACE

SOVEREIGN WEALTH FUNDS REPORT 2020

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SOVEREIGN WEALTH FUNDS 2020

Since the first news of the COVID-19 in January 2020 up until the presentation of this report, the pandemic has caused 109 million cases and over 2.4 million deaths worldwide. Inevitably, in their attempts to halt the spread of the virus, over the course of the last year governments have taken unprecedented measures in the form of business closures and mobility bans. This has led to a sharp downturn in supply (production) and demand, which, coupled with the climate of extreme uncertainty, has caused economic activity around the world to collapse. According to data from the International Monetary Fund (IMF), the global economy shrank by 3.5% in 2020, the steepest decline in recent decades. Moreover, unlike in other financial crises, all economic regions have experienced sharp drops or slowdowns in their activity, in a global economy that is increasingly interconnected through multiple channels (commercial, investment, financial).

Among advanced economies, the greatest impact was seen in the Eurozone (-7.2%) and the United Kingdom (-10%), two of the areas that were hardest hit by the pandemic, with the United States (-3.4%) shrinking somewhat less. In terms of emerging economies, the decline in activity in Latin America (-7.4%) and India (-8%) was particularly significant. The exception among the major economies was China, whose economic performance, although far below previous years, still enjoyed positive growth rates in 2020 (+2.3%). It should be noted that the collapse of economic activity in the world would have been much greater had it not been for the exceptional measures taken by governments to come

to the rescue of the private sector and families. The scale of the monetary and fiscal response, particularly in the United States and the European Union, is almost unprecedented and marks a step forward and a possible point of no return in the role assumed by states in a crisis of this magnitude.

In any case, in 2021 the consensus is that the world economy will bounce back, and the IMF forecasts growth of 5.5%, supported mainly by the effectiveness and spread of the vaccine and in anticipation of greater control of the health crisis, which will allow the economy to return to growth. However, this scenario continues to be shrouded in uncertainty, and the countries' economic activity will recover at different speeds depending on their access to vaccines and their vaccination capacity, but also on the strengths and vulnerabilities of their business sector in the post-crisis period. In addition to the peculiarities of this particular crisis and its possible short-term repercussions, it should be noted that the pandemic would leave significant structural changes in various areas, notably in terms of accelerating technological disruption in business and tempering globalization as we know it today.

Sovereign wealth funds have not escaped the impact of this extraordinary economic situation in the world economy, and have sought to reorient their strategies in response to these exceptional circumstances. In any case, in an environment with a need for high investment to drive economic recovery, the role of these instruments, which for the first time in history surpassed the 9 trillion dollars barrier in

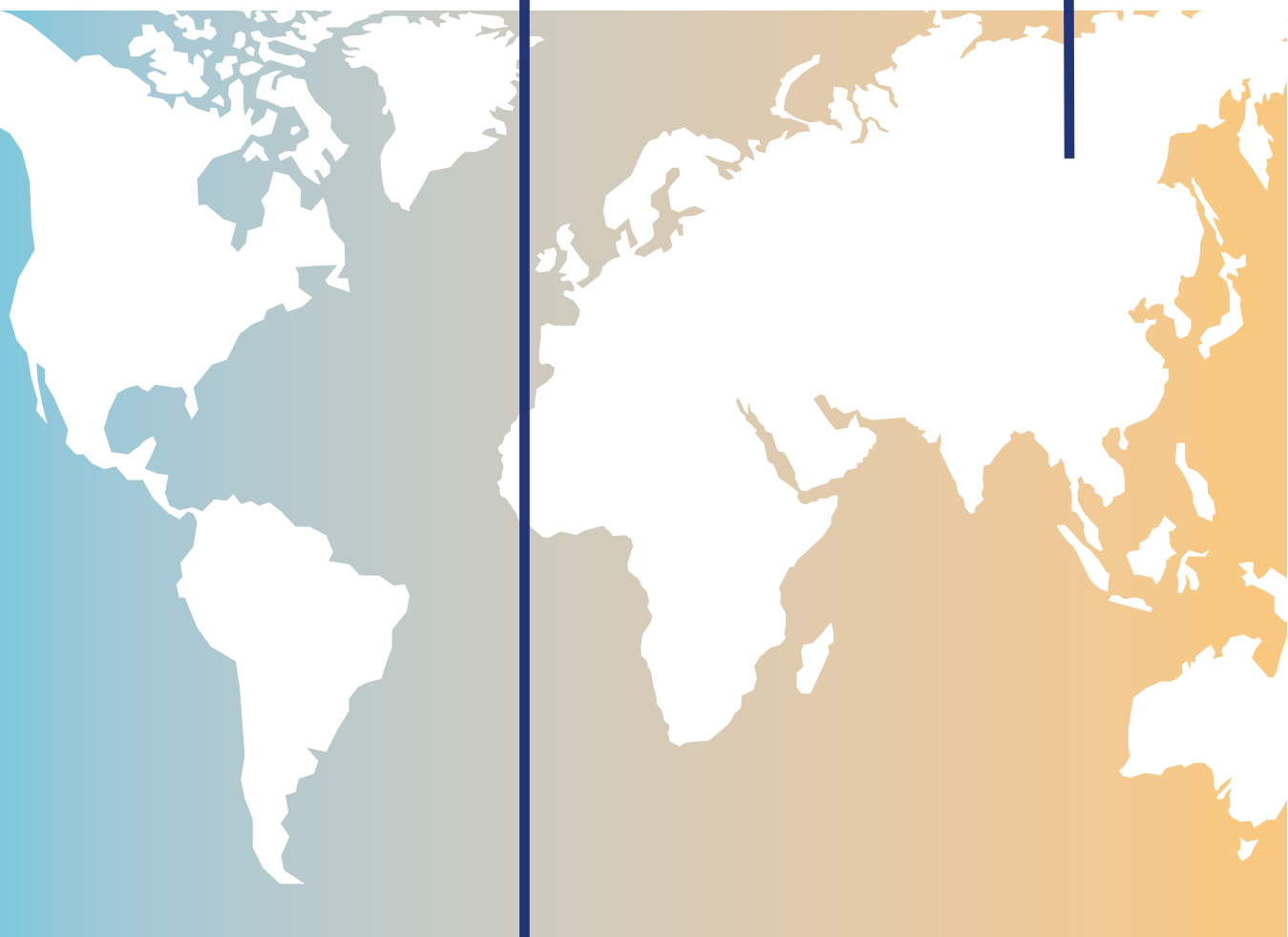
Preface

assets under management, is more important than ever before. They can play a critical role as both a fiscal cushion and in leading strategic investment projects for a more sustainable future. It should be recalled that sovereign wealth funds have become mainstream players in the world financial economy, both influenced by and influencing business trends. This sovereign wealth funds report, a joint project by ICEX-Invest in Spain and IE University, offers a rigorous in-depth analysis of these and other issues that are essential for an understanding of the new economic landscape in which we currently live. It also maps the 95 active sovereign funds, with their investment and portfolio-forming strategies.

According to the current 2020 edition of the report, the pandemic has reinforced pre-existing thematic trends among long-term investors. In addition, the report shows the heterogeneity and paradoxes of an industry in transformation. SWFs keep pushing for alternative sources of energy, mobility or food, investing heavily in tech-based companies and focusing on four major markets: the United States, China, India and the United Kingdom. Simultaneously, real estate (not only industrial but offices and hotels) and infrastructure (not only communications but mid-stream natural gas assets and road transportation) remain attractive target sectors. As said, SWFs have been instrumental during the pandemic supporting some of the large-scale vaccine development programs, procuring medical equipment, or contributing to national economic and social emergency plans. This emergency focus and the uncertainty of the global lockdowns explain why

from July 2019 to September 2020, the total value of sovereign fund transactions was down to 43 billion dollars, a heavy drop compared to our previous report, yet not translated to deal activity, which continued strong and focus on technology, life sciences and services.

In addition to these trends, the analysis in this ninth edition is enriched by several aspects of interest and includes an in-depth focus on one sector, one region and one sovereign fund. Concerning the sector, we examine the continued interest in logistics real estate reinforced by the rise of e-commerce in the post-pandemic world. The study of the geographic area consists of a novel analysis of the sovereign funds currently operating in Latin America, with a proposal that they can be used both as instruments for stabilizing the economic cycle and for strategic investment goals. The “in-depth” analysis focuses on China Investment Corporation (CIC), the world’s second-largest of its kind and one of the main investment arms of the Chinese government. Finally, we include a ranking of the currently active and prospective sovereign wealth funds and analyse the latest transactions carried out in Spain. As in previous years, we hope the report will generate greater and better knowledge of these institutional investors, and that it will continue to be a useful tool for professionals in the field of investment.



EXECUTIVE SUMMARY

SOVEREIGN WEALTH FUNDS 2020

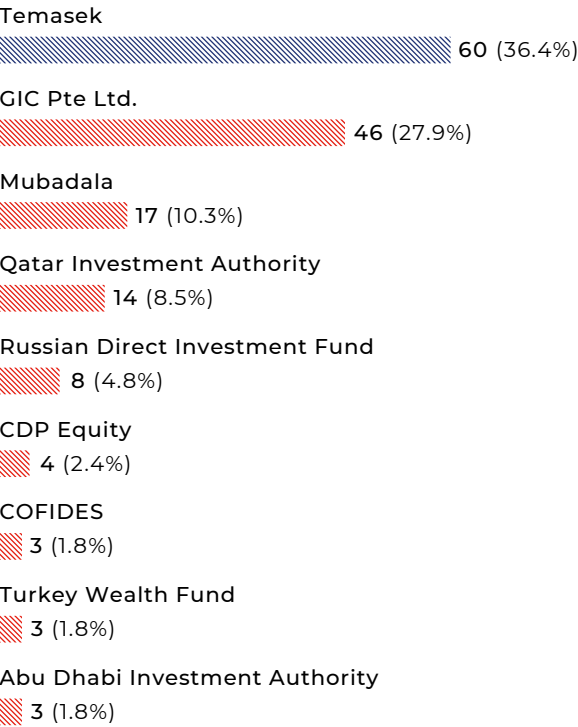
A Year of “Living Dangerously”: The COVID Pandemic and Sovereign Wealth Fund Direct Investments in 2019-2020

As stores of surplus capital, a primary raison d’être of many SWFs is to serve as fiscal buffers to provide fiscal support to owner governments. During the COVID pandemic, as lockdowns deepened, economic activity ground to a stop, impeding revenue generation, while dramatically increasing the demands on fiscal resources both directly and indirectly. In many cases, sovereign funds were called on to offset burgeoning budget gaps and to stabilize rapidly depleting fiscal resources even as budgets were cut and affected governments scrambled to find other available funding – including credit – to backstop the economic and financial impacts of the crisis. Reported drawdowns were widespread, ranging from large funds such as in Qatar, Russia, Singapore, and even Norway, where nearly 5% of the Government Pension Fund Global’s capital was earmarked for fiscal support, to small funds – as in Ghana, Nigeria, or Botswana – that are far less well-resourced.

Beyond direct fiscal support to owner governments, SWFs engaged in a variety of other supplemental measures, designed to provide relief to distressed sectors of local economies. Mubadala Investment Company (United Arab Emirates), for example, rolled out a \$114 million rent relief plan in the retail, residential, office, and hospitality sectors. In Russia, the Russian Direct Investment Fund (RDIF) has been actively engaged in various phases of its government’s vaccine development efforts, including investing in vaccine production. Besides, when and where appropriate, funds – from Singapore or Malaysia to Turkey have stepped in to fund or recapitalize local firms operating in key state sectors.

The most active Sovereign Wealth Funds 2019-2020

Deal count and % of total deals*



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University).
* July 2019-September 2020

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Our 2019-20 survey of sovereign wealth fund transactions spans July 2019 to September 2020 and consists of 165 transactions across 16 funds, representing aggregate deal value for transactions with data available—about 128—of over \$43 billion. Deal size averaged \$264 million, but with considerable range. For example, there were 22 deals above \$500 million and 40 deals under \$100 million. Notwithstanding such distinctions, our “Covid” sample, in many respects bears the striking hallmark of prior studies concerning participation and investing geographies, while continuing to evolve with markets and technologies in terms of sector allocation. This includes, importantly, the level of co-investing. In 2019-2020, approximately, at least 70% of the transactions identified involved other investors in both public and private sectors.

By geography based on the deal count, the United States, China, United Kingdom, and India, together account for 58% of the transactions in our sample. SWFs invest in technology, services, and life sciences, followed by real estate and finance. Globally we observe no major disruptions in geographic destinations but sector preferences deepen preexisting trends.

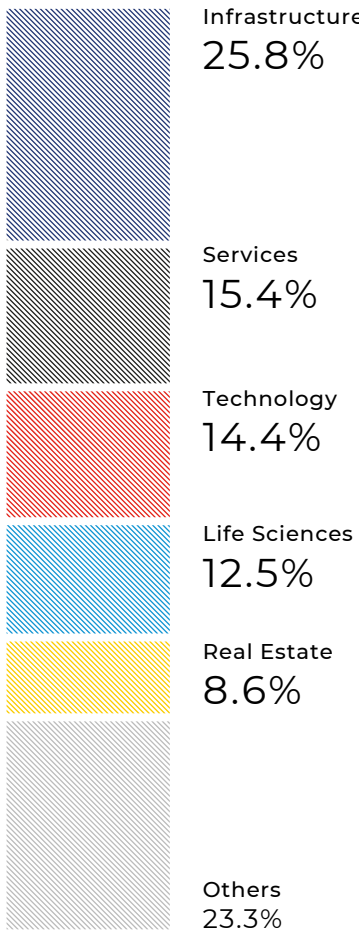
As it rages on, the Covid pandemic has engendered one of the largest global economic contractions in history. Investment activity in private markets has likewise contracted; direct investments by sovereign funds have inevitably been impeded. Those funds with demonstrated capacity in deal generation, sourcing, and execution were less so, as the ex-

periences of Temasek and GIC suggest. Notwithstanding, from July 2019 through September 2020, following well-established prior-year investment trends framed by geography and sector, the largest and most endowed sovereign funds once again dominated SWF direct investments. This reinforces a predominant point: Direct investment is largely the domain of institutional investors that have developed private market capacity, can maintain a long-term horizon for a least a portion of their portfolio, and have sufficient net assets to be able to bear liquidity risk. These attributes were prominent in our findings and accentuated by the experiences of the funds included in our sample.

Time, patience, and medical science will soon make fast work of Covid-19. Retrospectively, when reflecting on the experiences of SWFs during the pandemic, attention most certainly will turn to the depletion of assets due to drawdowns and the long term effects of slow economic growth, zero-bound interest rates, and low expected returns. However, perhaps the better key performance indicator will be the long-term resilience of SWFs exhibited through their practices—and adaptive responses—of “living dangerously”. [Read more about how SWFs developed adaptive responses in Ireland, Russia or India, among others. Also, explore the preferred sectors and geographies of SWFs during the pandemic year here both in deal count and total transaction value.](#)

Top 5 sectors 2019-2020

Percentage of total deal volume*



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)
* July 2019-September 2020

Pillars of the post-pandemic economy: SWFs go from hotels to warehouses

The COVID-19 crisis has accelerated a shift in logistics and supply chains around the world. International companies have long been looking to diversify from one manufacturing channel such as China, but the crisis has now pressed the need to develop alternate strategies in other countries or new processes at home. There will also be a significant change in demand on the side of the consumer, which will be either permanent or short-lasting.

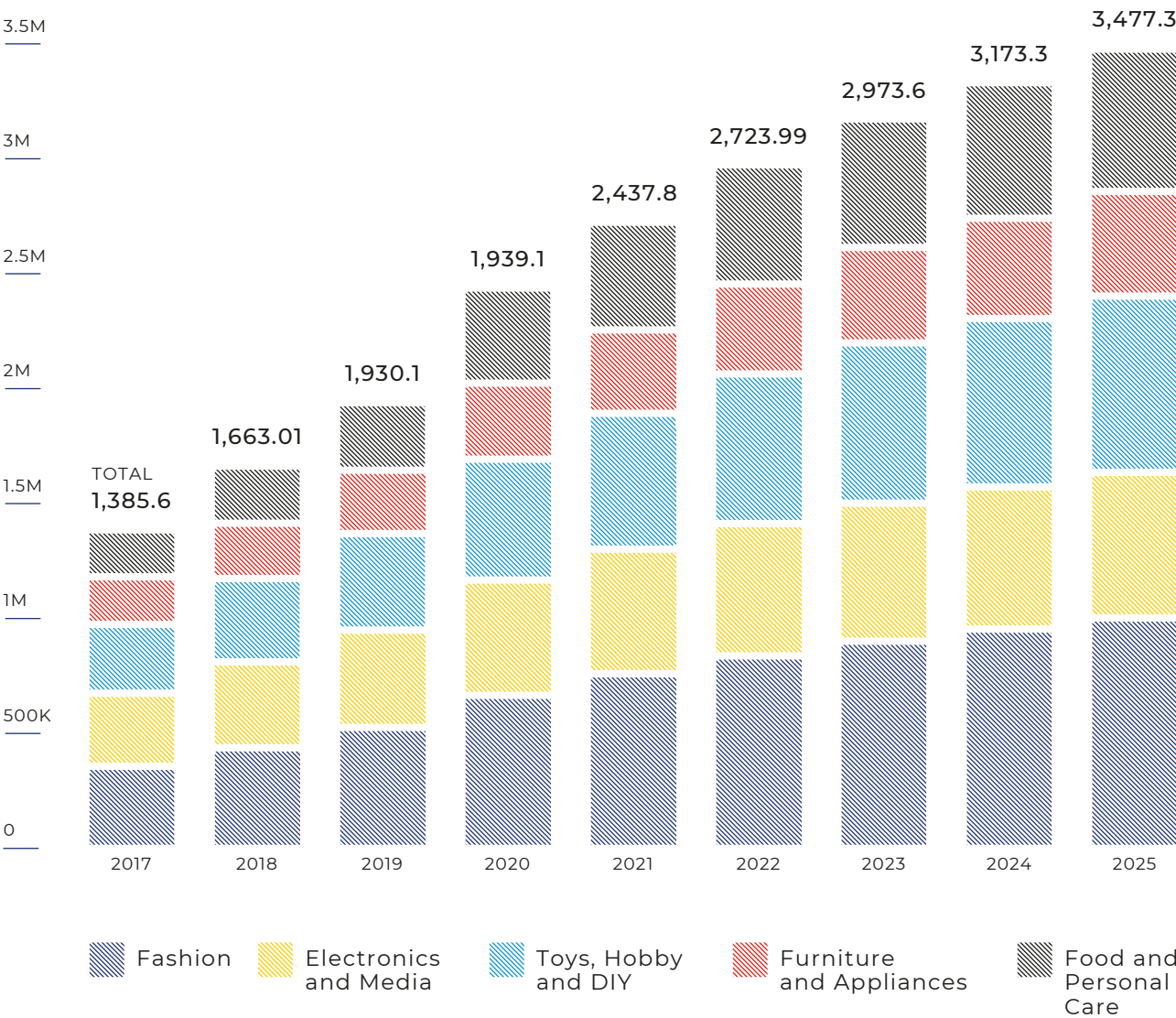
One of the most glaring issues surrounding global supply chains is the fact that many countries have relied on Asia, specifically China for their critical supplies. For example, the U.S has relied upon China for medical supplies and personal protective equipment (PPE) during the crisis. This has resulted in large shipments that take weeks to arrive onshore and even broken contracts between the two countries. A solution could be to develop sophisticated health care infrastructure within the home country at the national, regional, and local level.

Due to the fragility of global supply chains now exposed by the pandemic, increased scrutiny on foreign direct investment (FDI) into healthcare technologies and lessened overseas trade could have multiple effects. Although the processes will be more arduous and will be subject to enhanced oversight, the decline in global trade could accelerate a greener economy. A physical global trade decline and an increase in remote working capabilities are

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E-commerce Revenue Growth

\$billion



Source: Statista (Forecast adjusted for expected impact of COVID-19), November 2020

projected to decrease overall emissions. One study in Nature has projected a decrease of 4% to 7% if restrictions remain throughout 2020.

New Trends in Commerce and the Nature of Work
One area of the world of work during the pandemic is the necessity of remote workplaces. The overarching question is whether long term productivity in companies will increase. If so, there could be permanent changes in workplace dynamics, but one concern is how company culture will be affected. In-person interactions that facilitate the spontaneous sharing of ideas and brainstorming activities may be negatively impacted with a part of the workforce moved online.

E-commerce has now become the focal point of change in the world economy and is projected to rise from 47% in 2020 to 60% in 2024 in terms of user penetration. The consequences of such a rise include an ongoing need for data infrastructure and a shift from brick-and-mortar style inventory to warehouses and fulfillment centers.

Sovereign interest in industrial real estate is trending upwards since 2015. Today, warehouses and the wider logistics sub-sector represent 40% of all SWF real estate exposure by deal transaction value. SWFs have collaborated with some of the largest private and public owners and managers of logistics globally. It is difficult to find a large transaction of logistics assets portfolios without the participation of an SWF, either directly or through established joint ventures.

Prologis, Inc., the San Francisco-based logistics giant, has collaborated with multiple SWFs. Norges Bank Investment Management has established in both European and US logistic markets. On its part, Abu Dhabi Investment Authority (ADIA) collaborated with Prologis too in another logistics project in China in 2011, which has now turned into a perpetual fund in 2019 named the Prologis China Core Logistics Fund, worth \$3.5 billion.

Singapore's GIC has been one of the most active industrial real estate investors in recent years. Its notable partnerships include a joint venture with Australian ESR developing a logistics fund focused on strategic locations around Sydney, Melbourne, and Brisbane. GIC has a history of large logistics project investments. These include the acquisition of European logistics property firm P3 in 2016, a portfolio of properties from Apollo Global Management, and the creation of Global Logistic Properties in 2011 alongside the China Investment Corporation, and partnerships with ADIA in data infrastructure companies such as Cellnex and Equinix.

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SWFs are establishing themselves as strategic owners of warehouses and data centers used by global companies delivering goods and entertainment worldwide. The consumer ecosystem transformation, shorter supply chains, and restrictive global trade regulation represent new challenges for SWFs but also provide opportunities to adjust their long-term strategy to meet this rapid pandemic-induced paradigm shift. Continue learning how regulation changed to increase the scrutiny on state-backed investors in Europe and beyond.

Latin America and the Caribbean SWFs: From fighting the Covid-19 to unveiling strategic opportunities.

The effects of the Covid-19 crisis in Latin America will stay in the region for the coming years. That is the conclusion of an ECLAC report released in October 2020. By March 2020, only a quarter of the population in the region was able to work from home. Thus the “stay-at-home” policies extensively applied in the region, to reduce mobility and prevent the spread of the virus, have had a tremendous impact on 76% of the workforce in the region. Almost 45% of jobs are in contact-intensive sectors (like restaurants, retail stores, or public transportation), compared to just over 30% for emerging markets. Moreover, more than half of the population has no medical coverage, in the midst of this world pandemic. The result of these factors is that poverty rates can go back to 2005 levels, and extreme poverty could reach almost 20% in the region.

Latin American Sovereign Wealth Funds vs Covid-19

Sovereign fund	Country	AuM (US\$bn) (PRE COVID-19)	AuM (US\$bn) (POST COVID-19)	Covid-19 measures (in US\$bn)	Covid-19 withdrawals (as % of total AuM) (PRE COVID-19)
Fondo de Estabilización Económica y Social	Chile	14.19	9.7	3.10	22%
Fondo de Reserva de Pensiones	Chile	10.44	11.20	Contributions suspended	N/A
Heritage and Stabilization Fund	Trinidad and Tobago	6.01	5.8	0.98	15%
Fondo de Estabilización Fiscal	Peru	5.47	0.001	5.77	105 %
Fondo de Ahorro y Estabilización	Colombia	3.70	0.47	3.23	87%
Fondo Mexicano del Petróleo	Mexico	1.04	1.09		
Fondo de Ahorro de Panamá	Panama	1.35	1.40	0.19	14%
Fondo de Estabilización Macroeconómica	Venezuela	0.003	0.003	0.00	N/A
Natural Resources Fund	Guyana	N/A	0.14	0.00	N/A
Savings and Stabilization Fund	Suriname	N/A			
TOTAL		42.20	29.90	13.27	

Source: Sovereign Wealth Research (IE Center for the Governance of Change)

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The efforts made by Latin American governments to fight back the medical, economic and social crisis amounted to 8% of the regional real GDP, as of November 2020^[1].

Within those extraordinary measures, Latin American countries have issued new debt (the debt to GDP ratio is expected to grow 10 percent points in one year), financed credit institutions and withdrawn resources from sovereign stabilization funds. Every effort is needed, given the region is expected to be the hardest hit by Covid-19 in the developing world^[2].

In this chapter, we show how countries which had maintained prudent fiscal positions and instruments over the last decade were better prepared to face this pandemic. How much of these sovereign buffers have been used during the crisis? In which way sovereign wealth funds helped to alleviate the economic effects of the Covid-19 crisis? What can be learnt? In the second part of the chapter, we will focus on how using the SWFs not only to mitigate the impact of the virus but also on how to adapt the productive models to avoid such impacts in the future, as well as to catalyse opportunities and attract investments through SWFs.

The region has 10 SWFs with assets under management that amounted to more than US\$42 billion at the end of 2019. Twelve months and a pandemic later, the total AuM contracted to US\$29 billion as of June 2020. The difference, US\$13 billion, has been either committed or directly withdrawn by governments to combat the effects of the Covid-19 econo-

mic, medical and social crisis. Peru, Colombia, and Chile SWFs accumulate most of this effort with withdrawals totalling US\$12.1bn.

An opportunity for strategic development and co-investment and to catalyze FDI into the region. Latin America has traditionally had a low investment level which has inhibited its capacity for growth and development. The investment (as a share of GDP) in the region has averaged 20% over the last 30 years (1990-2019), which is four percentage points lower than the World's average.

Latin America capital should be long-term oriented, to contribute both to finance industrial development policies, as well as to support infrastructure and capitalize companies of strategic interest for the different governments. As seen, the Latin America SWF industry is heavily oriented toward budget stabilization and fiscal buffer. With regard to this, there is a window of opportunity for a more ambitious SWF strategy that combines fiscal and development objectives and that fosters FDI attraction.

The establishment of sovereign funds with development and strategic purpose has proliferated in recent years, as has the creation of joint operations that enable the attraction of foreign capital. Both trends are shaping the evolution of the sovereign wealth funds industry, however, none of them has been utilized by sovereign funds in Latin America. The region could benefit from adopting these strategies for several reasons. First, as explained before, Latin America has a low level of internal savings and depends on international sources of capital to

close this investment gap in comparison to other geographical areas. Second, there are numerous deficiencies affecting productivity. There is a huge deficit of infrastructures, for instance, and manufacturing productivity is quite low due to persistently low levels of innovation. SWFs tend to invest heavily in infrastructure and exporting companies. Third, sovereign funds may generate a call effect on other long-term investors promoting the type of FDI needed in Latin America: long term, stable and development-oriented. Fourth, the existence of SDFs in the region could remove entry barriers, ease deal sourcing, and reduce legal risks, so that international investment funds can increase their exposure in the region. Continue learning about how different countries used their SWFs to fight back the COVID-19 and how the virus changed the SWFs landscape in the region.

“SWFs In-Depth”. The great experiment: China Investment Corporation in Europe and beyond

When one thinks of the world's largest SWFs, the China Investment Corporation (CIC) naturally comes to mind. Exceeding \$1 trillion in assets under management, the CIC ranks second among global SWFs. Its size and the developmental trajectory of its ultimate sponsor, the People's Republic of China, has engendered equal parts fascination and scrutiny from investors, regulators and academics.

The CIC is a microcosm of China's experimentalist approach to economic governance. This “in-depth” chapter chronicles the CIC's unique story from inception 13 years ago, which is a story of organizational learning and adaptation at its core. Established in 2007, a handful of reformist policymakers and Wall Street returnees were the architects behind the CIC. Over the years, the organization has evolved from a fledgling SWF highly reliant on external expertise to a global SWF with the capacity to move markets. More importantly, CIC is paving a new way forward that is increasingly reflective of its unique identity.

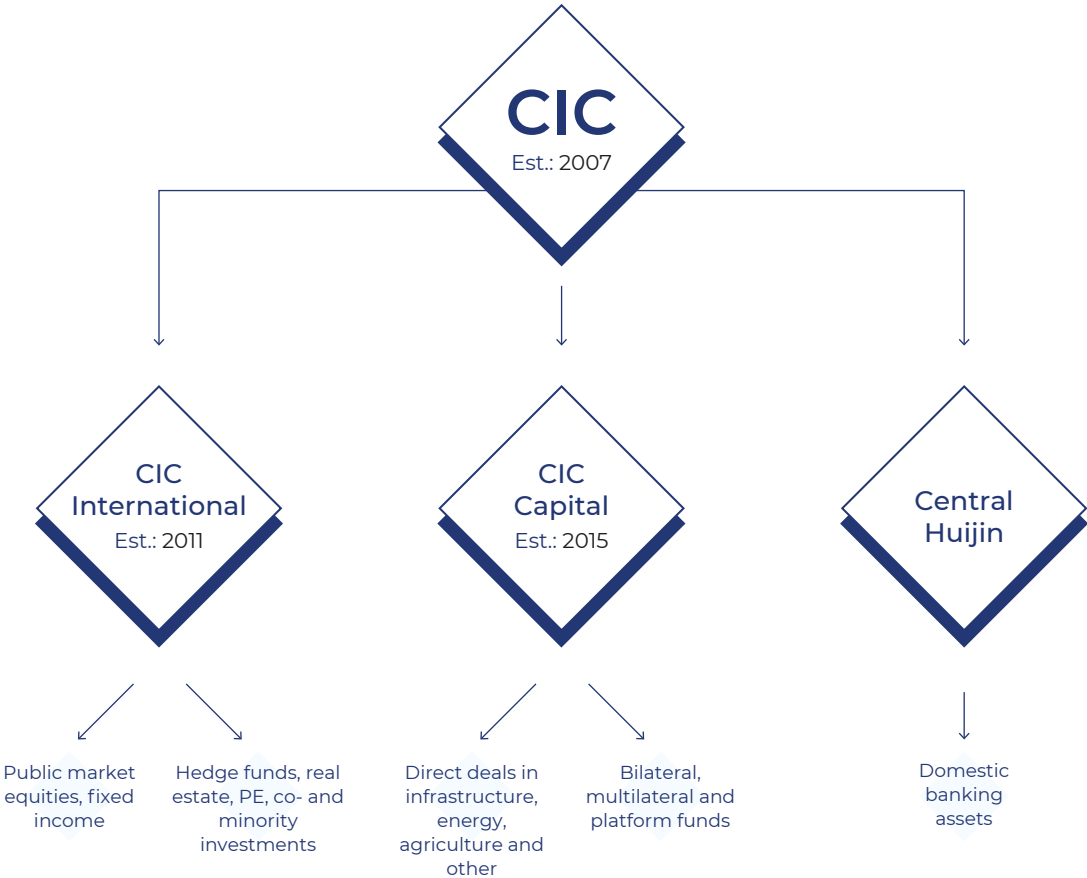
The CIC is in many ways a hybrid entity, adaptive to China's legacy of socialism manifest in the commitment to state ownership, new industrial policy and a prioritizing of national economic development, but also financialized and marketized forms of economic governance that reflect broader trends in the global economy.

[1] See IMF, Regional Economic Outlook, October 2020, Chapter 4: Fiscal Policy at the Time of a Pandemic: How Has Latin America and the Caribbean Fared? Available here: <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere#Ch4>

[2] <https://www.santander.com/en/press-room/insights/the-future-of-latin-america-after-Covid-19>

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**China Investment Corporation:
Organisational Structure
as at 2018**



Source: CIC annual report 2018. (n.d.). CIC. Retrieved 11 May 2020

CIC was established in 2007 as a global SWF, which allowed to diversify a portion of China’s vast foreign exchange reserves. China had established two SWFs before CIC. One is the State Administration of Foreign Exchange (SAFE) that was established in Hong Kong in 1997. SAFE has been actively managing China’s foreign reserves since then, reaching \$3.1 trillion as of December 2019. The other pre-existing fund is the National Social Security Fund (NSSF), established in 2000. It relies almost exclusively on external asset managers, and it is a more conservative fund than CIC. As of 2019, NSSF had \$406 billion invested primarily in domestic assets. The CIC is unique as it is the only Chinese SWF that can diversify its foreign reserves acting as a global SWF.

The history of the CIC can be characterized by three phases. The early years from 2007 to 2010, defined by learning, a paired-back organizational structure, and a focus on financial acquisitions. Coinciding with the global financial crisis, the CIC committed to a series of bold financial investments that reflected a willingness to take on risky projects. Next came the middle years from 2011-2014 characterized by a scaling back of the kinds of high-profile investments made in the early period. This is an era of retrenchment for the SWF, with greater attention to organizational capacity building. Around this time, the CIC also ventured into new partnerships with SWFs and private institutional investors via bilateral and multilateral partnerships that resulted in a series of successful infrastructural acquisitions. Finally, in the post-2015 era, the CIC takes flight. With the establishment of CIC Capital, the SWF renewed its commitment to diverse forms of direct investment and partnerships amidst the shifting sands of China’s domestic and international economic outlook. We layout these three periods of CIC development in the penultimate sections of the chapter.

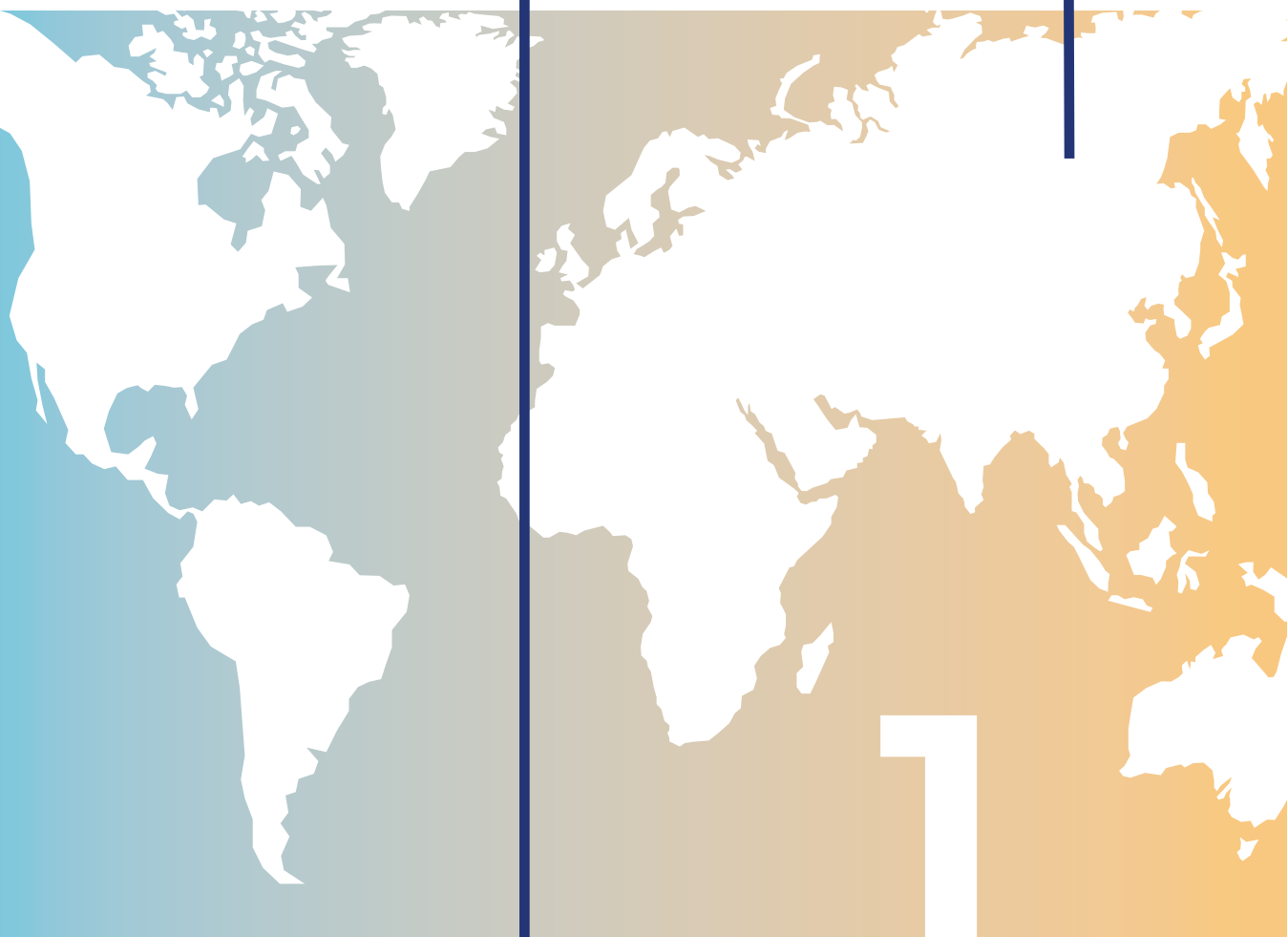
Given the current political economic landscape, we can foresee two key considerations for this key investor. First, **CIC will attempt to balance its mandate to diversify foreign exchange reserves with the current thrust of industrial policy, which favors domestic investment.** This means the fund will pivot more toward its domestic portfolio and engage in partnerships and consortia deals supported by CIC’s ‘China perspective’ that

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bring foreign technology to China or cultivate domestic enterprise. The CIC ecosystem is one such long-term strategy that will place the CIC on a trajectory to integrate itself deeper into the intra-state network of SOEs, state banks and funds targeting priority technologies like semiconductors and microchips.

Second, the CIC has autonomy over its own reserves. In contrast, central-level SOEs that are realizing the bulk of foreign projects are heavily invested in BRI countries, which are coordinated at the government-to-government level. For the CIC, whose target markets are non-BRI countries in Europe and North America, minority stakes will be the way forward, but where the commercial terms, regulatory environment and the optics of any given transaction are equally decisive for deal-making.

Uncharted waters lie ahead for SWFs. The CIC's ability to weather the coming storm is ultimately dependent on its ability to build lasting arrangements to bridge the divide between the demands of China's domestic and international markets. [Continue reading here on how CIC has carved out its own path and what are the next steps for the second largest SWF on earth.](#)



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A YEAR OF “LIVING DANGEROUSLY”: THE COVID PANDEMIC AND SOVEREIGN WEALTH FUND DIRECT INVESTMENTS IN 2019-2020

SOVEREIGN WEALTH FUNDS 2020

With the first reported cases of the Coronavirus in Wuhan in January 2020, the world had not yet grasped the enormity of what was to come. The arc of the crisis grew more expansive as cases rose first slowly, then with frightening speed across Europe, North America, and beyond. By the end of February 2020 global markets peaked, then, through March, plummeted. In this narrow window developed market equities lost over 30% of their value. Initially, credit markets also froze, until bolstered by an inflow of liquidity by major central banks. With global monetary authorities signaling support, equity and credit markets slowly recovered during April and began an extended climb ending 2021 at record levels. While the recovery in part restored the capital base of sovereign and other institutional investors, wider consequences resulting from the pandemic have continued to affect sovereign funds in a variety of ways. These include drawdowns, supplemental investment and relief programs, and longer term structural changes to investment programs.

As stores of surplus capital, a primary *raison d'être* of many SWFs is to serve as fiscal buffers to provide fiscal support to owner governments. As lockdowns deepened, economic activity ground to a stop, impeding revenue generation, while dramatically increasing the demands on fiscal resources both directly and indirectly. In many cases, sovereign funds were called on to offset burgeoning budget gaps and to stabilize rapidly depleting fiscal resources even as budgets were cut and affected

governments scrambled to find other available funding – including credit – to backstop the economic and financial impacts of the crisis.^[2] Reported drawdowns were widespread, ranging from large funds such as in Qatar, Russia, Singapore, and even Norway, where nearly 5% of the Government Pension Fund Global's capital was earmarked for fiscal support^[3], to small funds – as in Ghana, Nigeria, or Botswana – that are far less well-resourced.^[4]

Beyond direct fiscal support to owner governments, SWFs engaged in a variety of other supplemental measures, designed to provide relief to distressed sectors of local economies. Mubadala Investment Company (United Arab Emirates), for example, rolled out a \$114 million rent relief plan in the retail, residential, office, and hospitality sectors.^[5] The Palestine Investment Fund, an institution integral to the economy of the Authority, mobilized to develop credit relief programs for small and medium size enterprises whose business operations were severely disrupted by the pandemic.^[6] In Russia, the Russia Direct Investment Fund (RDIF) has been ac-

[1] The authors wish to acknowledge the editorial and data support of Dr. Javier Capape, whose insightful comments and critical commentary have contributed measurably to this report.

[2] See for example, <https://www.reuters.com/article/us-swf-assets-analysis/sovereigns-raid-rainy-day-funds-for-100-billion-after-covid-19-storm-idUS-KBN2650SZ>

[3] <https://www.fitchratings.com/research/sovereigns/fitch-affirms-norway-at-aaa-outlook-stable-28-08-2020>

[4] In aggregate, Reuters reports of over \$130B being withdrawn from SWF by September, 2020. Op.cit.

[5] See <https://www.pionline.com/sovereign-wealth-funds/mubadala-draws-portfolio-coronavirus-fight>

[6] See <http://www.pif.ps/2020/04/08/6023/>

SOVEREIGN WEALTH FUNDS 2020

A Year of “Living Dangerously”:
The COVID Pandemic and Sovereign Wealth
Fund Direct Investments in 2019-2020

tively engaged in various phases of its government’s vaccine development efforts, including investing in vaccine production through portfolio companies (see below for further commentary).^[7] In addition, when and where appropriate, funds – from Singapore^[8] to Turkey^[9] - have stepped in to fund or recapitalize local firms operating in key state sectors.

In certain cases, SWFs have experienced structural changes to their investment programs resulting from the pandemic. Perhaps the most consequential of these is the Ireland Strategic Investment Fund (ISIF), which established a discrete sub-portfolio structure, known as the Pandemic Stabilization and Recovery Fund (PSRF). The Fund is capitalized by €2 billion from existing ISIF assets with the objective to complement other government Covid policy initiatives. The Fund is mandated to invest across the capital structure in large and medium enterprises of more than 250 employees or annual revenues of greater than €50 million that were commercially viable prior to the pandemic and can demonstrate their ability to return to sustainable operations.^[10]

Given the vast scale of the pandemic and the scope of SWF responses, our gaze turned next to Covid impacts on SWF investment activity, specifically that related to direct investments, which require both time and tactile engagement to complete. While investments in liquid securities in public markets are easily supported and executed electronically, private market deals require extensive due diligence and detailed coordination between multiple parties on matters ranging from negotiating terms and deal structuring. Indications from private-equity activity in both Europe and the US – both prominent private markets for SWF investors – are that deal-making dropped to a five-year low in the first half of 2020, down 13% in Europe from the prior year and twice that in the US.^[11] With borders closed and travel restricted, it is thus natural to expect a slowdown in direct investment activity by SWFs. Our research set out to address this question in the broader context of the robustness and adaptability of sovereign investment programs to external shocks and the rapid onset of unanticipated disruption.

THE 2019-2020 “COVID” SAMPLE

Our 2019-20 survey of sovereign wealth fund transactions spans July 2019 to September 2020 and consists of 165 transactions across 16 funds, representing aggregate deal value for transactions with data available—about 128—of over \$43 billion. This cohort is certainly smaller than our 2018-19 sample by some 100 deals. It included 8 deals of over \$1 billion with the largest of these being GIC Private Limited (GIC)’s participation in the ADNOC Gas Pipeline consortium. In fact, in the sample, GIC was most active in deals over \$1 billion. Excluding the ADNOC transaction as an outlier, deal size averaged \$264 million, but with considerable range. For example, there were 22 deals above \$500 million and 40 deals under \$100 million. Notwithstanding such distinctions, our “Covid” sample, in many respects bears the striking hallmark of prior studies with respect to participation and investing geographies, while continuing to evolve with markets and technologies in terms of sector allocation. This includes, importantly, the level of co-investing. In 2019-2020, approximately, at least 70% of the transactions identified involved other investors in both public and private sectors.

To baseline the immediate effects of the pandemic across our sample, we segmented our 15 month dataset to capture indications of investment cycle effects from the full manifestation of the crisis beginning in March 2020. We note that slightly over 50 deals were announced in the six months between July and December 2019, with just over 40 closing in that window. In contrast, over 60 deals were announced in the first six months of 2020. Moreover,

more than two-thirds of these were between March and June 2020 with approximately 30 coming discretely in the three months between March and May. Also, important to note is that the vast majority—over 50—of deals in this full six month window are attributable to Temasek Holdings Limited (Temasek) and GIC.

This period from March to May 2020 posed considerable risks to institutional portfolios. However, it also offered opportunities to build positions in investments at lower valuations or to rebalance portfolios whose allocations had become distorted as the economic consequences of the pandemic became clearer. As is characteristic of periods of extreme market volatility, in March and April 2020 reports began to circulate of the potential effects of drawdowns and equity sell-offs by SWFs. Conversely, reports also surfaced of SWFs accumulating large equity holdings so as to evoke SEC filing requirements in the US. These revealed that Norges Bank, for example, made a number of significant public market investments during this period, including those in existing portfolio holdings—e.g. Carnival Cruise Lines—which had declined steeply in value in March.^[12] Similarly, the Public Investment Fund of Saudi Arabia also invested actively in scale in this period, acquiring positions in several large integrated oil companies, as well as selected other companies whose values had declined steeply.

[7] See <https://sputnikvaccine.com/about-us/the-russian-direct-investment-fund/>

[8] See <https://www.reuters.com/article/us-semcorp-marine-m-a-semcorp-industry/temasek-steps-in-to-support-semcorp-marines-1-5-billion-rights-issue-idUSKBN23FOLM>

[9] See <https://www.preqin.com/insights/research/blogs/sovereign-wealth-funds-worlds-in-motion>

[10] See <https://isif.ie/pandemic-stabilisation-and-recovery-fund>

[11] <https://www.spglobal.com/marketintelligence/en/news-insights/research/the-impact-of-the-covid19-pandemic-on-the-private-equity-market>

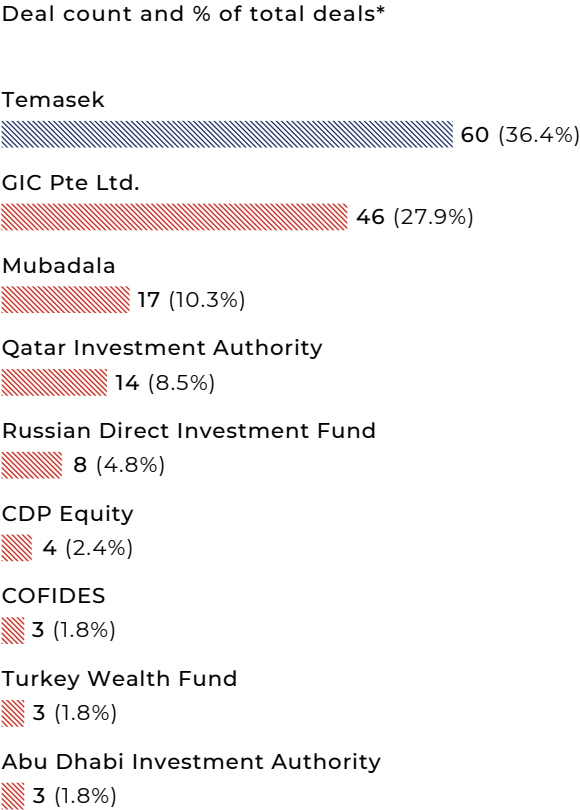
[12] These transactions are largely attributable to required rebalancing as the fund’s 70% equity allocation dipped below its 2% threshold buffer. See <https://www.bloombergquint.com/business/norway-s-1-trillion-wealth-fund-expands-u-s-stakes-amid-rout>

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FIGURE 1

The most active Sovereign
Wealth Funds 2019-2020



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University).

* July 2019-September 2020

ply.^[13] More generally with respect to this March-April 2020 window, State Street and the IFSWF report that SWFs maintained consistent allocations to cash and bonds relative to equities and in fact used the market downturn to rebalance portfolios to maintain aggregate exposures to equities.^[14] As these were public market transactions with liquidity profiles quite different from the direct investments we monitor, we otherwise do not include them in our sample or our analysis.

VIEWS OF INVESTMENT ACTIVITY BY FUND

At the fund level, our sample for 2019-20 is once again dominated by funds in Singapore, specifically GIC and Temasek. Of the 165 transactions identified during the sample period, 110 of these—over 65%—were completed by these two funds. Similar to prior years, Mubadala (11% of deals) and the Qatar Investment Authority (9%) also dominated the top ranks. In addition, we note significant activity by the RDIF (8 deals or 5%), as well by CDP Equity (2.5%), Abu Dhabi Investment Authority (ADIA), COFIDES^[15] (Spain) and the Turkey Wealth Fund (2%, each), the last two are new to our ranks (See Figure 1).

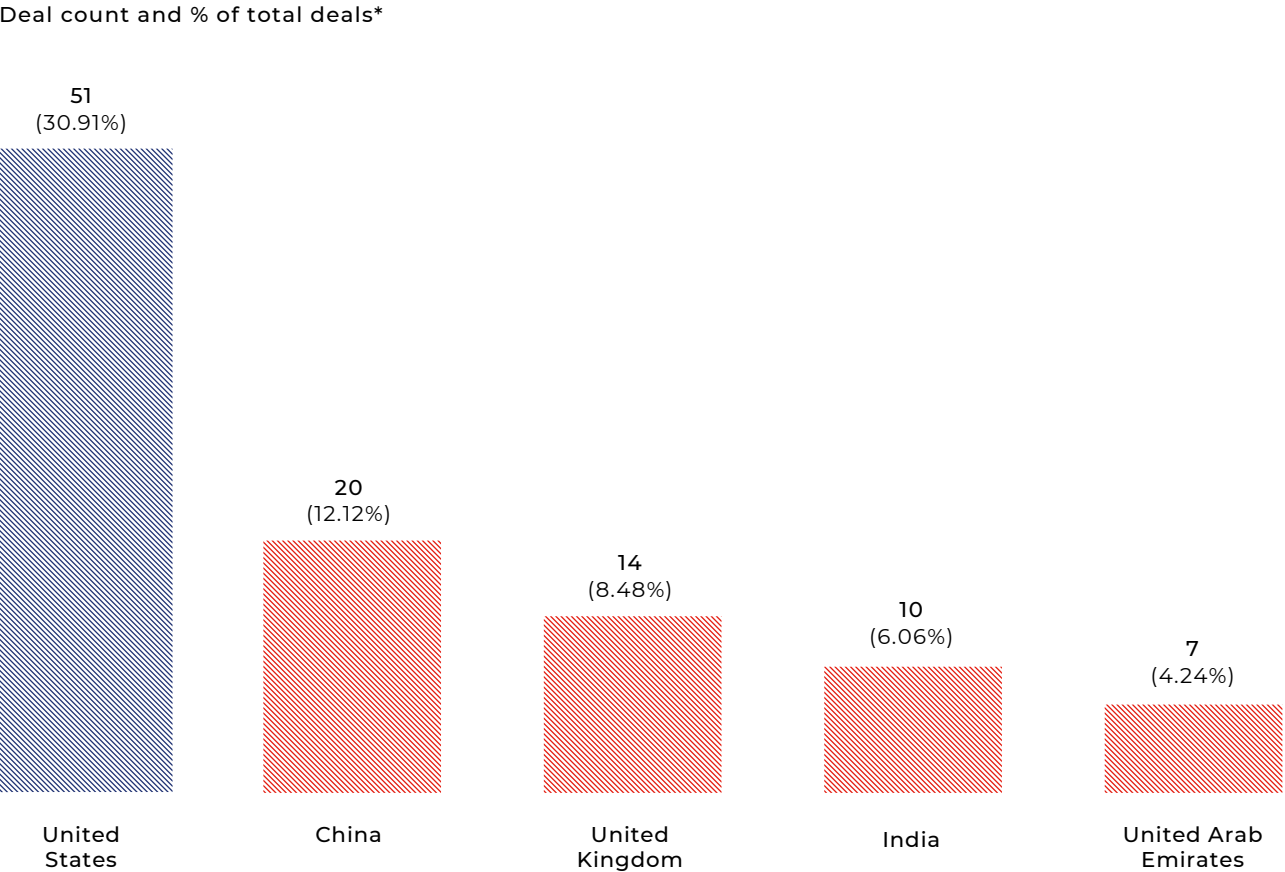
[13] See <https://www.reuters.com/article/us-health-coronavirus-saudi-oil/saudi-arabia-buys-stakes-in-four-big-european-oil-firms-source-idUSKCN21R01W>

[14] In certain cases – e.g. Norway’s GPFG – rebalancing is mandated whenever allocation variances exceed 2% of statutory levels.

[15] Compañía Española de Financiación del Desarrollo, COFIDES S.A.

FIGURE 2

Top 5 destination countries 2019-2020



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)

* July 2019-September 2020

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Temasek was the dominant SWF investor in terms of the number of investments made during the sample period. Temasek’s portfolio geographic focus was primarily the United States, followed closely behind by China. Sector interest was characteristically very diverse, but exhibited particular concentrations in biotechnology, internet, food, and software. One such transaction to highlight was Temasek’s lead in a June 2020 round of \$250 million in BioN-Tech, the German biotechnology company,^[16] aimed at funding accelerated vaccine development. Also noteworthy is Temasek’s pivot is to agribusiness and innovative food products, such as Impossible Foods Inc, that are encouraging ethical consumer food choices.^[17] Following Temasek in volume, GIC in terms of volume of transactions and the preferred geographic markets. GIC was especially active in software, fintech, and pharma, as well as expanding its investment holdings in various segments of real estate, including hotels, office, and warehouse. Moreover, GIC was also a member of the consortium that invested in the ADNOC Gas Pipelines, a large global energy infrastructure platform valued at over \$20 billion. The deal was to acquire a 49% stake for approximately \$10.1 billion and included a number of other large global infrastructure investors, including Global Infrastructure Partners, Brookfield Asset Management, and Ontario Teachers.^[18] Finally,

with relevance for the Spanish economy, GIC acquired the Hotel Edition, jointly with APG—a Dutch large pension investor, for €220 million. The property is a luxury hotel located on a historical site in Madrid.

Other prominent SWF direct investors in 2019-20 include the Qatar Investment Authority (QIA) and Mubadala. The U.S. market was overwhelmingly dominant for both funds. Large deals for QIA were in the consumer, cyclical (consumer goods whose demand fluctuates with business cycles) sector in the U.S. market. In July 2020, QIA also invested in German biotechnology company CureVac, known for developing vaccines and antibodies for infectious diseases^[19]. QIA also focused attention on India and China, where in each country it completed 2 deals. In 2019-20, QIA generally acquired only minority stakes, in the companies into which they invested. Like QIA, Mubadala also heavily invested in the U.S. market, well-leveraging its local platform. The fund led the funding round of \$700 million for REEF Technology, a U.S based logistics startup that specializes in using parking lots as hubs for delivering food and other services, like Covid-19 testing. Mubadala also invested \$235 million into German biotechnology company Evotec SE, specializing in drug discovery and development.^[20] Only 20% of Mubadala’s investments were directed to the UAE, where the primary target was the financial sector.

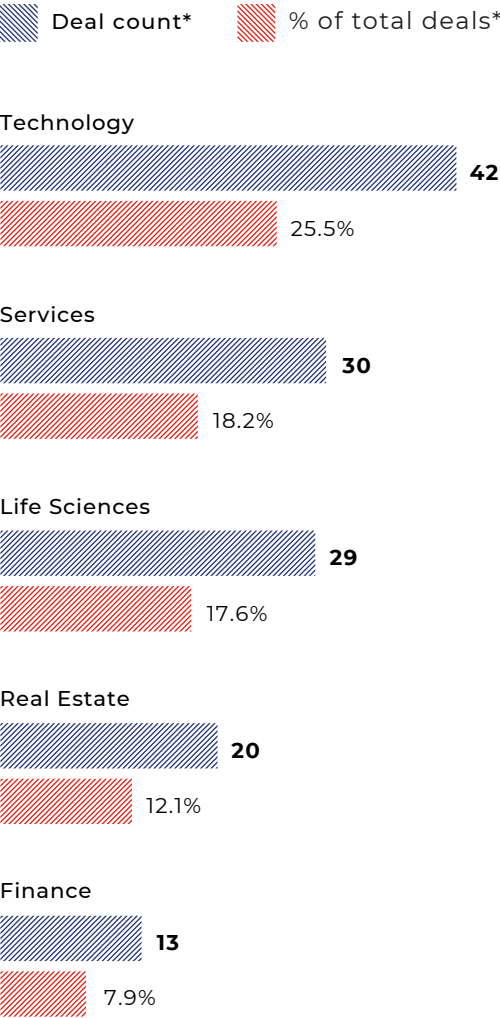
Finally, we highlight the commencement of investment activities by the Sopef, the Spain-Oman co-investment fund, established in 2018 jointly by COFIDES and the Oman Investment Authority. Sopef completed 3 deals during our period of analysis, targeting such sectors as food and capital goods—a manufacturing company for the renewable wind industry and a machinery manufacturer for the aeronautics and automotive industries—. Two more deals also closed in the last quarter of 2020 not included in the analysis (See Annex II).

VIEWS OF INVESTMENT ACTIVITY BY
GEOGRAPHY AND SECTOR

By geography based on deal count, the United States (31%), China (12%), United Kingdom (8.5%), India (6%), Singapore (4%), Australia (4%), United Arab Emirates (4%), Germany (3%), Spain (3%) and Russia (3%) together account for 79% of the transactions in our sample (Figure 2). In terms of sectors, globally we observe no major disruptions based on deal count, but a deepening of the preexisting trends: technology (25%), services (18%), and life sciences (17.6%) lead the top-3 ranking, followed by real estate (12%) and finance (8%). Once again, however, this profile masks considerable diversity in purpose and objectives (Figure 3).

FIGURE 3

Top 5 sectors 2019-2020



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)

* July 2019-September 2020

[16] <https://www.biopharma-reporter.com/Article/2020/06/30/BioNTech-receives-investment-from-Temasek>

[17] <https://www.swfinstitute.org/news/80970/temasek-participates-in-series-g-round-in-impossible-foods>

[18] See <https://www.globenewswire.com/news-release/2020/06/23/2052009/0/en/ADNOC-Announces-20-7-Billion-Energy-In-frastructure-Deal.html>

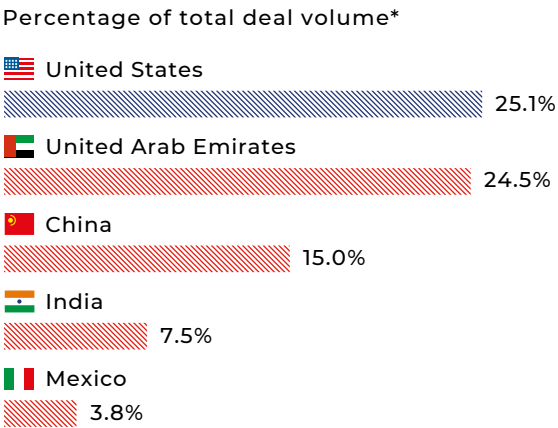
[19] <https://www.reuters.com/article/us-qia-curevac-stake/qatar-investment-authority-takes-stake-in-vaccine-maker-curevac-idUSKCN24M1F7>

[20] See <https://www.bloombergquint.com/markets/abu-dhabi-wealth-fund-mubadala-to-invest-235-million-in-evotec>

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FIGURE 4

Top 5 destination countries
by deal volume 2019-2020



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)
* July 2019-September 2020

When classified instead by transaction value^[21], we observe (Figure 4) some discontinuity: after the United States, the United Arab Emirates follows due to two mega-deals in infrastructure (as previously noted). The UAE is followed closely behind by China, India, and Mexico (an outlier this year because of another one-off mega deal in road transportation infrastructure). By deal value (Figure 5), infrastructure (26%) leads the sector ranking followed by services (14%), technology (14%), life sciences (12.5%), and real estate (8.6%).

[21] It is our practice to highlight the vulnerability of classifying deals by aggregate deal value. Thus, we fully acknowledge that a partial sample, limited information, and barriers to effectively attributing investment and ownership interests all significantly constrain the utility of deal value metrics versus those based on deal count.

The United States has perennially been the primary destination for SWF capital. Once again, the U.S. has attracted a disproportionate share—over 30%—of deals in the aggregate, valued at \$11 billion, at least. The sectors into which attracted most investment include technology and software, with 16 deals, and life sciences with 10. Also emerging is food-tech and agribusiness (in line with global industry preferences, See Figure 6). With ever-increasing impacts of climate change looming, coupled with concerns over food security, the United States promised to remain a key player in the future of food cultivation and development. In biotech, spurred by the creation and distribution of the Pfizer-BioNTech coronavirus vaccine, SWF confidence in United States biotechnology research, can be expected to increase.

The United Kingdom also received significant investment traction with sector representation in biotechnology, internet and related technologies, and commercial services sectors. This has largely been from funds with active investment programs in the United Kingdom, including GIC, Temasek, Mubadala, and QIA, who continue to acquire both majority and minority stakes in the British market.

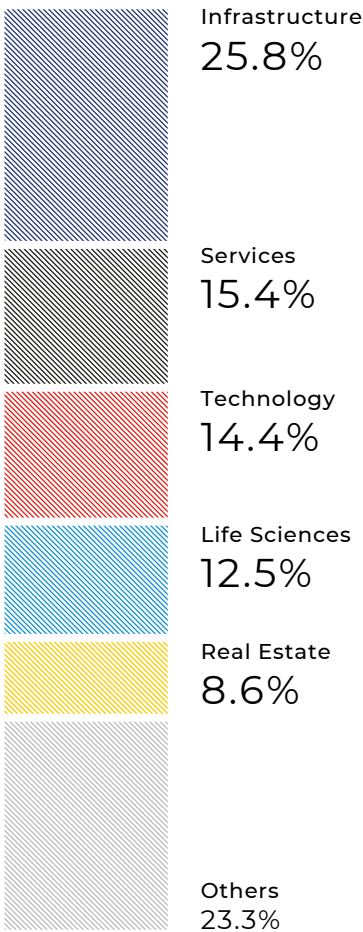
With 6 investments, Singapore has attracted capital primarily into the technology, services, and agribusiness sectors. Agriculture only consists of 1% of Singapore’s total land area, and urban farming is becoming increasingly popular as the country imports about 90% of their food supply.^[22] Temasek

[22] See <https://www.reuters.com/article/us-singapore-landrights-food/singapore-makes-room-for-allotment-gardens-as-urban-farming-takes-root-idUS-KCN1RR1D5>

FIGURE 5

Top 5 sectors 2019-2020

Percentage of total deal volume*

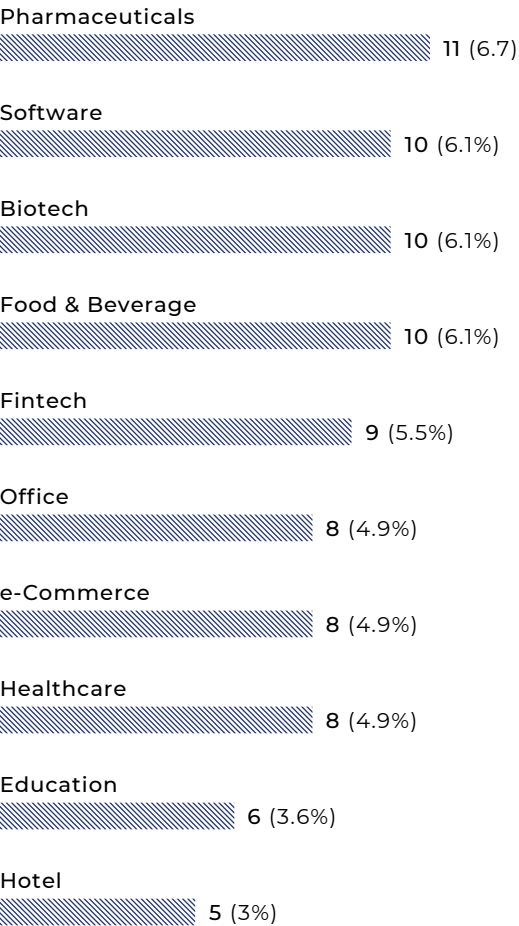


Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)
* July 2019-September 2020

FIGURE 6

Top 10 industries 2019-2020

Deal count and % of total deals*

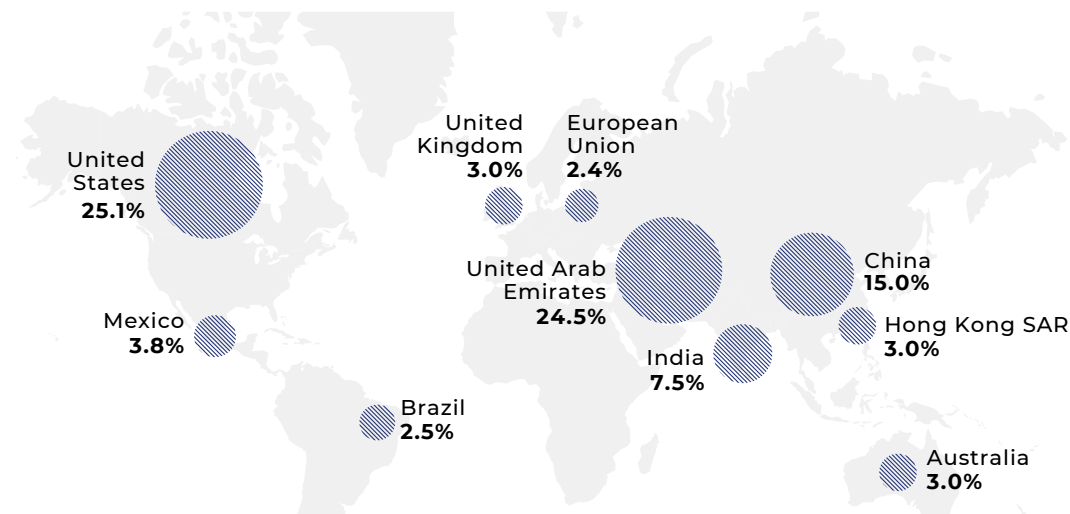


Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)
* July 2019-September 2020

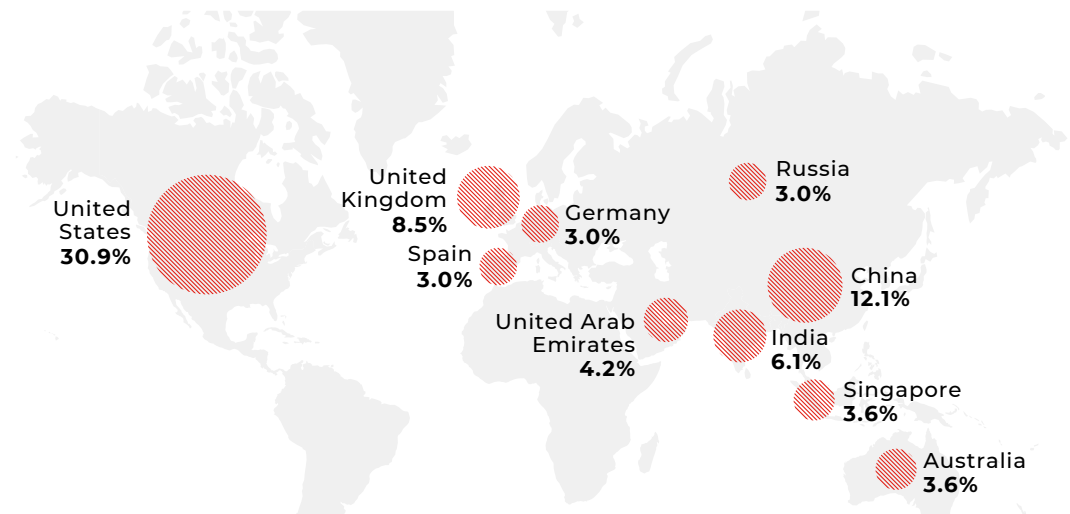
FIGURE 7

SWF destinations during the pandemic year

% of total **deal volume** (Top 10)*



% of total **deal count** (Top 10)*



Source: Sovereign Wealth Research (IE Center for the Governance of Change) and SovereignNET (Fletcher School, Tufts University)

* July 2019-September 2020

put \$8 million into plant-based meat maker Growthwell Group, a company focused heavily on R&D in food technology.^[23] In Australia, investments have primarily been in the real estate sector, primarily from GIC, which has been targeting office and retail spaces in the country. The UAE saw 8 investments within financial services, infrastructure, and general services. By far the largest of these was the aforementioned ADNOC Gas Pipeline Assets LLC deal that included GIC among others in the investor group.^[24] Mubadala was also involved heavily in investing within the financial sector in the UAE, acquiring stakes in MEEG Holdings LLC and Anglo-Gulf Trade Bank, a fully digital corporate bank.

Temasek and GIC have been the primary SWFs investing in Germany, mostly within technology and pharmaceuticals. \$250 million went to BioNTech, an immunotherapy firm whose co-manufactured Covid-19 vaccine with Pfizer is currently being distributed worldwide as of the time of this writing.^[25]

[23] See https://growthwellfoods.com/about_us/index

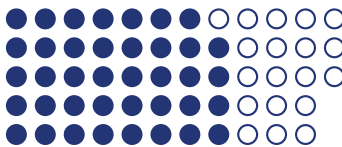
[24] See <https://www.reuters.com/article/emirates-pipeline-bonds-int/ad-noc-pipeline-investor-galaxy-sells-4-billion-in-three-part-bonds-idUSKB-N27C11V>

[25] See <https://www.ft.com/content/2626ec05-5bc5-4121-afc4-be62c29c4894>

IE Sovereign Wealth Research Ranking 2020

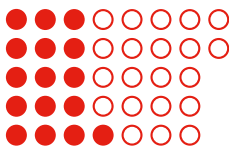
58

Pre-2010 SWFs
19 IFSWF members



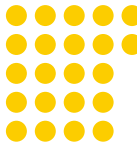
37

New SWFs (2010-2020)
21 IFSWF Members



22

Countries considering establish an SWFS



IE Sovereign Wealth Research Ranking 2020

- Pre-2010 SWFs
- New SWFs (2010-2020)
- Countries Considering SWFs
- IFSWF members
- IFSWF members

Currently, there are 95 active sovereign wealth funds, one more than in our 2019 Ranking. 67 countries have established at least one SWF, two more than a year ago. The Middle East, China, Southeast Asia and Norway are the four most relevant SWFs poles. Assets under management totalled \$9.1 trillion. SWFs have widely spread in recent years. Since 2010, 35 new funds have been established. Other 22 countries are actively considering establishing an SWF. Debates over new SWFs are growing in Sub-Saharan Africa and Central Asia. Thus, in 2021, there are 117 operating or prospective-SWFs. 39 SWFs are full or associate members of the International Forum of Sovereign Wealth Funds.

Source: IE Sovereign Wealth Research (2020) with information obtained from funds annual reports and websites. In their absence, we relied on estimates from Bloomberg, Global SWF, and the Sovereign Wealth Center

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Other, smaller sectors in which Germany has seen investment include real estate, including a pre-Covid deal for Hotel de Rome, a luxury Berlin hotel, in November 2019.

With 10 deals, India continues to attract significant SWF capital, particularly from funds in Singapore and the Gulf. In 2019-20, Temasek was again among the most active, participating in half of the transactions identified. Particular attention was drawn to India’s telecom sector followed by retail. In fact, by far the largest deal was the Saudi Public Investment Fund’s 2.3% minority stake in Reliance Industries’ digital unit Jio Platforms valued at approximately \$1.5 billion.^[26] India’s infrastructure sector is also gaining additional traction with the active involvement of National Investment and Infrastructure Fund of India (NIIF). Representative, though beyond the scope of our sample, the NIIF acquired Essel Devanahalli Tollway and Essel Dichpally Tollway in November 2020.^[27] Also later in 2020, it led a \$390 million round of equity funding for Ayana Renewable Power to boost clean energy generation in India.^[28]

Despite the size and resources of the funds in our sample, and the aspirations of the development finance community, there remains little evidence of direct investing activity by SWFs in capital constrained regions such as Sub-Saharan Africa and Central America (Figure 7). In Latin America, GIC continues to deepen its investment profile by participating in recent deals in infrastructure and technology; Brazil and Mexico represent total aggregate deal size of nearly \$3 billion. For economies with funds that invest domestically, such as India, investment mandates extend to catalyze inward investment. The NIIF’s mandate, for example, is focused in part on developing India’s infrastructure sector by building roads and highways in India. Recently, NIIF’s master fund received its final round of funding and closed at \$2.3 billion in equity commitments from the Indian government, the Public Sector Pension Investment Board, the U.S. International Development Finance Corporation, the Abu Dhabi Investment Authority, Ontario Teachers’ Pension Plan, and Temasek. The continued growth of sovereign development and strategic investment funds, particularly in emerging economies, gather further momentum in 2020 as Indonesia announced fund-raising plans for a sovereign fund to attract capital to scale Indonesia’s infrastructure sector.^[29]

REACHING BEYOND THE COVID DIVIDE:
REFLECTIONS ON ADAPTIVE RESPONSES

Certainly the period that defines our analysis is like no other in recent history. While earlier investment patterns and practices remain discernible in our sample, several themes have emerged from the crisis to extend our prior experience. Here we reach beyond our sample horizon to the present to identify the persistence of these themes without prejudice either to their effectiveness or appropriateness. Thus, we note again the engagement of the RDIF in Russia’s Covid response and a discrete increase in investment cooperation between Russia and China through the Russia-China Investment Fund (RCIF). Also relevant is the emergence of the Turkey Wealth Fund as active investors during this period. Lastly, we return to Ireland’s response to the pandemic and its potential long term impacts.

In the wake of the Covid-19 outbreak in March 2020, the RDIF entered into a partnership with Japanese firm K.K Mirai Genomics to fund the Russian company Medpromresurs, LLC, promoters of a diagnostic system for Covid-19 testing. In the intervening months, the RDIF became actively involved in various dimensions of the development, production, and distribution of Russia’s vaccine entrant, Sputnik V.^[30] Though the rapid pace of the vaccine’s development has raised concerns as to efficacy, recent reporting^[31] has lent support to its safety and

utility. Notwithstanding, the depth of this engagement marked a significant increase in profile for the RDIF as an investor in life sciences with four of its eight deals in the sector. A second notable example is Assisted Surgical Technologies (AST), a company which develops and manufactures surgical robots.^[32] RDIF has expects that their surgical robots will help reduce the cost of robotic surgery by nearly five times, and plans to enter the Chinese, other Asian, and Middle Eastern markets with this technology.

In addition to these stand-alone investments, we also observe an increase in the level of co-investment between Russia and China through the Russia-China Investment Fund (RCIF). This too involved some level of joint sponsorship in the pharmaceuticals sector, which is an expanding industry for both countries. The Russia-China Investment Fund was established in 2012 by the RDIF and the China Investment Corporation (CIC). In October 2019, RDIF, along with the RCIF and several Middle Eastern funds, coordinated the launch of Alium Pharmaceutical Holding, the end result of a merger between Binnopharm and OBL Pharm.^[33] With a product portfolio of over 200 pharmaceuticals, the holding has emerged as one of Russia’s largest pharma companies. The total investment

[26] See <https://www.reuters.com/article/us-reliance-investment-pif/reliance-sa-ys-saudis-pif-to-invest-1-49-billion-in-jio-idUSKBN23PTY8>

[27] See <https://economictimes.indiatimes.com/industry/indl-goods/svs/construction/national-investment-and-infrastructure-fund-acquires-2-essel-projects/articleshow/78996150.cms?from=mdr>

[28] See <https://www.dealstreetasia.com/stories/ayana-cdc-niif-eversource-220743/>

[29] See <https://www.asianinvestor.net/article/how-indonesias-new-swf-aims-to-raise-infra-funds/464214>

[30] See for example <https://sputnikvaccine.com/about-vaccine/>

[31] See [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00234-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00234-8/fulltext)

[32] See https://rdif.ru/Eng_fullNews/4630/

[33] See https://rdif.ru/Eng_fullNews/4461/

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amounted to \$200 million.^[34] Beyond cooperation in pharma, the RDIF and CIC, also through the RCIF, participated in funding Shenzhen-based Dianmao Technology Co Ltd, aka Codemao, an online platform that teaches children how to “code”. Completed in November 2014, Codemao has raised a total of \$360.4 million from 25 total investors.^[35]

The investment activity of the Turkey Wealth Fund (TWF) also increased materially during our sample period in part due directly to crisis impacts. The TWF is a \$33 billion fund established in 2016 and is owned by Turkey’s federal government. It makes investments primarily in Turkey. The TWF has four primary “strategic pillars” that drive their investment decisions. These are to enhance the value of all assets in the fund, provide equity to investments within Turkey, provide equity to support Turkey’s international economic goals, and improve financial markets. According to the Fund’s website, their portfolio consists of twenty-three companies from eight different sectors.

The TWF acknowledge 2020 as a year of “mergers and acquisitions” during which Turkey made Covid-related legislative changes directed at the TWF to facilitate companies affected by the pandemic re-

ceiving financial support.^[36] To support the largest Turkish mobile phone operator, the TWF acquired a controlling stake of 26.2% in Turkcell.^[37] Other investments were focused on Turkey’s financial sector, including for example the 20% acquisition of the payment and card systems company, Platform Ortak Kartli Sistemler. State-owned banks Vakifbank, Ziraat Bankasi, and Halkbank had originally created the system in order to further develop payment card financial infrastructure.^[38] Similarly, the fund invested \$293 million into the development of the Istanbul Finance Center, with the ultimate goal of positioning Istanbul to be the financial hub for the region. The project is still underway, and is expected to be complete in 2022. Most recently, in November 2020, the TWF sold a 10% stake in Borsa Exchange to Qatar Investment Authority for approximately \$200 million.

The ISIF has also continued to invest in housing and regional development during the pandemic. Their focused investments are to support and scale Irish businesses. In January 2020, they acquired a significant minority stake in Eblana Avenue, a co-living apartment development, for approximately \$9 million. At the end of November 2020, ISIF has entered into a joint venture arrangement with Cork County Council to support residential development

which have been ill-affected by the pandemic.^[39] In Q4 2020, ISIF acquired additional stakes in the industrial and financial sectors within Ireland. To close, we return to the ISIF’s Pandemic Stabilization and Recovery Fund. With the flexibility to invest across capital structures, the PSRF has committed support towards aviation, hospitality, and SME lending to stabilize these sectors.^[40] The pandemic had a severe impact on the domestic aviation sector, with the Irish carrier Aer Lingus likewise struggling. In Q4 2020, the fund backed Aer Lingus by providing debt financing of €150 million.

CONCLUDING THOUGHTS

As it rages on, the Covid pandemic has engendered one of the largest global economic contractions in history. Investment activity in private markets has likewise contracted; direct investments by sovereign funds have inevitably been impeded. Those funds with demonstrated capacity in deal generation, sourcing, and execution were less so, as the experiences of Temasek and GIC suggest. Notwithstanding, from July 2019 through September 2020, following well-established prior year investment trends framed by geography and sector, the largest

and most endowed sovereign funds once again dominated SWF direct investments. This reinforces a predominant point: Direct investment is largely the domain of institutional investors that have developed private market capacity, can maintain a long-term horizon for a least a portion of their portfolio, and have sufficient net assets to be able to bear liquidity risk. These attributes were prominent in our findings and accentuated by the experiences of the funds included in our sample.

Time, patience, and medical science will soon make fast work of Covid-19. Retrospectively, when reflecting on the experiences of SWFs during the pandemic, attention most certainly will turn to the depletion of assets due to drawdowns and the long term effects of slow economic growth, zero-bound interest rates, and low expected returns. However, perhaps the better key performance indicator will be the long-term resilience of SWFs exhibited through their practices—and adaptive responses—of “living dangerously”.

[34] See http://rcif.com/en/articles/articles_1573017077825.htm

[35] See <https://www.crunchbase.com/organization/codemao>

[36] See <https://www.mondaq.com/turkey/operational-impacts-and-strategy/923898/turkey-wealth-fund39s-exemptions-and-privileges-in-connection-with-the-government39s-covid-19-measures>

[37] See <https://seenews.com/news/turkey-wealth-fund-closes-acquisition-of-262-interest-in-turkcell-718453>

[38] See <https://www.tvf.com.tr/en/contact/disclosures/2020/20-partnership-at-platform>

[39] <https://www.echolive.ie/corknews/arid-40089749.html>

[40] <https://isif.ie/uploads/publications/FY-2020-Report-including-H12020-Economic-Impact-Report.pdf>



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PILLARS OF THE POST-PANDEMIC ECONOMY: SWFs GO FROM HOTELS TO WAREHOUSES

SOVEREIGN WEALTH FUNDS 2020

The COVID-19 pandemic has had profound effects on economies around the world. The total economic impact of the pandemic, in terms of loss in gross domestic product, could be as much as \$82 trillion,^[1] and many governments will be facing budgetary shortfalls for years. The ultimate impact is expected to be much greater than the financial crisis of 2007-2008 in both size and scope.

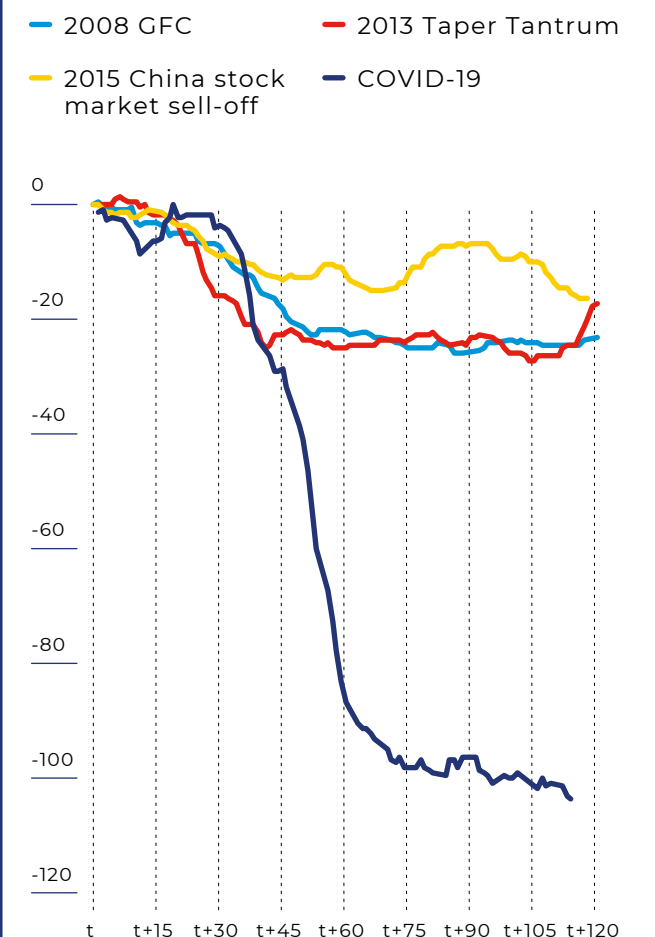
While nearly every country in the world has experienced tremendous human and economic costs from the COVID-19 pandemic, some countries struggled more than others, both in their efforts to contain the virus, and in developing a financial response. Lockdowns resulted in severe oil price declines, and the currency values of a number of developing economies plummeted in the early weeks of the crisis. Partly as a result of these shifts, capital outflows from emerging market economies (EMEs) were far greater than had been seen with prior crises. The OECD, using data compiled by the Institute of International Finance, compared the COVID-19 pandemic with the Global Financial Crisis of 2008, the “Taper Tantrum” of 2015 (when the US Federal Reserve announced a winnowing of its quantitative easing program), and the Chinese stock market sell-off of 2015. The severity of the pandemic is orders of magnitude greater than prior crises.

[1] Centre for Risk Studies, Cambridge University Judge Business School, Economic impact (May 21, 2020), <https://insight.jbs.cam.ac.uk/2020/economic-impact/>.

FIGURE 1

Capital Outflows from Emerging Market Economies in the COVID-19 Pandemic - Compared to Past Crises

\$billion



Source: Jonathan Fortun, Institute of International Finance, Inc.; OECD

FIGURE 2

New Foreign Direct Investment Screening Procedures Related to the COVID-19 Pandemic

CANADA

“Enhanced scrutiny” of any FDI in a business that is critical to the pandemic response. This measure was a reaction to “opportunistic investment behaviour” caused by declines in valuations of Canadian businesses as well as by investment of State-owned enterprises that could threaten the country’s economic or national security interests.

EUROPEAN COMMISSION

The Commission recommended full use of national FDI screening regimes and urged member States that do not have screening regimes to set them up.

FRANCE

Added biotechnology to the list of critical sectors in which foreign acquisitions are subject to prior governmental approval. Furthermore, a temporary regime lowering the voting right threshold in listed companies that triggers FDI screening – from 25 per cent to 10 per cent – is to be introduced upon approval from the Conseil d’État.

SPAIN

Governmental authorization will be temporarily required, until June 30, 2021, for a foreign acquisition of 10% or more of stock in certain critical sectors affecting public order, public security or public health.

ITALY

Expanded the scope of FDI screening by adding finance, credit and insurance to the list of strategic sectors. Furthermore, the screening will temporarily apply to foreign acquisitions from within the EU.

GERMANY

Foreign acquisitions of 10 per cent stock in German companies developing, manufacturing or producing vaccines, medicines, protective medical equipment and other medical goods for the treatment of highly infectious diseases would require prior governmental authorization.

HUNGARY

Introduced a temporary foreign investment

Screening mechanism applicable to investors from both inside and outside the EU and will be effective until 31 December 2020. Prior governmental approval is needed in 21 industries, including health care, pharmaceuticals and medical device manufacturing, as well as non-medical industries. Approval will be denied if an investment violates or threatens public security or order, in particular the security of supply of basic social needs.

INDIA

Introduced a requirement for prior governmental approval for all investment originating from countries that share land borders with India as a response to concerns about company vulnerabilities during the pandemic.

AUSTRALIA

Monetary screening threshold for all foreign investments in Australia was temporarily lowered to zero to protect national interests. Consequently, all foreign acquisitions now require prior approval. In addition, the time frame for screening procedures has been extended from 30 days to six months.

Source: Sovereign Wealth Research (IE Center for the Governance of Change) based on United Nations Conference on Trade and Development, 2020 World Investment Report

Pillars of the post-pandemic economy: SWFs go from hotels to warehouses

Sovereign investment practices will undoubtedly change as a result of the severe economic shock of the pandemic. But in some cases, the pandemic did not instigate change so much as hasten changes that were already underway. Importantly, the pandemic has highlighted the importance of logistics, both in terms of how physical goods are stored and delivered, but also in how digital goods, such as Netflix films or work files stored on company systems, are accessed on demand from housebound consumers and workers.

One need look no further than the toilet paper shortage in the early days of the pandemic to see the importance and fragility of modern supply chains. Around the world, toilet paper became scarcer on store shelves, and news coverage of the phenomenon showed (and perhaps exacerbated) what seemed to be panic-buying and hoarding of toilet paper. But another, more prosaic logistical phenomenon also helps explain the toilet paper shortage: the toilet paper market is bifurcated into a commercial market and a consumer market, and when governments instituted lockdown orders, demand shifted dramatically to the consumer market because fewer people were at work.^[2] A highly efficient retail toilet paper market was suddenly upended by an unprecedented shock, and the toilet paper industry

could not just “flip a switch” and shift production from commercial to retail outlets. As one observer noted, such a shift would require “new relationships and contracts between suppliers, distributors, and stores; different formats for packaging and shipping; new trucking routes — all for a bulky product with lean profit margins.”^[3]

COVID-19 RESHAPES WORKLIFE AND HOMELIFE

As countries imposed lockdown rules around the world, supply and demand changed dramatically. Supply chains built on Chinese manufacturing, for example, were broken and will need to be rebuilt. In some cases, COVID-19 will simply accelerate a shift towards manufacturing hubs in other countries, particularly in ASEAN countries such as Vietnam and Thailand, which offer lower labor costs. And, in some cases, businesses will simply add a new chain or two to its existing supply chains. As a DHL executive noted in a recent Forbes article, “Six or seven years ago, a lot of companies were already talking about China+1. That means they had a lot of manufacturing in China but to de-risk—they didn’t want to put all their eggs in one basket—they were looking around, saying ‘where else can we put an alternative plant?’”^[4]

A larger issue than rebuilding supply chains, however, is the potential for permanent changes in demand. Demand may be affected in two ways. First, demand may change because of a global economic slowdown related to the lockdown. As the World Bank noted in its June 2020 Global Economic Prospects report, the COVID-19 pandemic “has struck a devastating blow to an already-fragile global economy. Lockdowns and other restrictions needed to address the public health crisis, together with spontaneous reductions in economic activity by many consumers and producers, constitute an unprecedented combination of adverse shocks that is causing deep recessions in many advanced economies, emerging markets and developing economies.”^[5] The World Bank forecasted a 5.2% reduction on global GDP in 2020, the “deepest recession in decades,” and suggested that COVID-19 may have serious long-term effects, including lower investment, ongoing unemployment and underemployment, and a “retreat from global trade and supply linkages.”

Second, COVID-19 may have lasting impacts not just on the size of the global economy, but also on the nature of the economy itself—what people buy, how they spend their leisure time, how they travel, and how and where they eat. Some of these changes will be temporary, while others may be permanent. Basic staples such as cereals are unlikely to be dramatically affected, with an estimated 5% decline in

trade volume in the short term, while automobile trade volumes are expected to plunge by more than 50% because of factory shutdowns and decreased consumer spending.^[6]

Meanwhile, e-commerce has already increased dramatically over the course of the pandemic. As an example, many educational institutions shifted to online teaching, with students receiving synchronous or asynchronous lessons through videoconferencing utilities such as Zoom, Webex, Skype, GoToMeeting, ooVoo, QQ and others. Consumers hunkered down in their homes have relied on delivery services for groceries and consumer goods. And, some restaurants have been able to stay open by providing for delivery services through web-based delivery platforms. Even where delivery may not be available, consumers are taking advantage of the ability to buy online and pick-up their products at the store.^[7]

[2] As one article noted, “the average household will use 40% more toilet paper than usual if all of its members are staying home around the clock. That’s a huge leap in demand for a product whose supply chain is predicated on the assumption that demand is essentially constant. It’s one that won’t fully subside even when people stop hoarding or panic-buying.” Will Oremus, Marker (April 2, 2020), <https://marker.medium.com/what-everyones-getting-wrong-about-the-toilet-paper-shortage-c812ei358fe0>.

[3] Id.

[4] Wade Shepard, COVID-19 Undermines China’s Run As The World’s Factory, But Beijing Has A Plan, Forbes (March 26, 2020), <https://www.forbes.com/sites/wadeshepard/2020/03/26/covid-19-undermines-chinas-run-as-the-worlds-factory-but-beijing-has-a-plan/#44eaff70459a>.

[5] The World Bank, June 2020 Global Economic Prospects, <https://openknowledge.worldbank.org/bitstream/handle/10986/33748/9781464815539.pdf.xv-xvi>.

[6] McKinsey & Company, COVID-19: Briefing Materials (July 6, 2020), <https://www.mckinsey.com/-/media/McKinsey/Business%20Functions/Risk/Our%20Insights/COVID%2019%20Implications%20for%20business/COVID%2019%20July%209/COVID-19-Facts-and-Insights-July-6.pdf>.

[7] John Koetsier, COVID-19 Accelerated E-Commerce Growth ‘4 To 6 Years’, Forbes (June 12, 2020). This phenomenon is now so ubiquitous that what was a pandemic trend may see “permanent adoption,” according to an Adobe Digital Insights executive: “While BOPIS [‘buy online, pick up in-store’] as a niche delivery option pre-pandemic, it is fast becoming the delivery method of choice as consumers become more familiar with the ease, convenience and experience.” Id.

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COVID-19 ALSO IMPACTS TRADE AND TRADE REGULATION

Onshoring is also expected to continue gaining momentum for several reasons. As noted above, supply chain risk is leading firms to diversify and, in some cases, shorten their supply chains. As a result, some kinds of transportation firms stand to benefit, while others, including oceanic transportation, are likely to suffer. As a logistical consultant has noted, for example, the COVID-19 pandemic has “exposed a painful truth about the U.S. dependency on Asia and especially China for critical goods,” such as medical supplies like personal protective equipment: “[n]ot only does it take weeks to get the large shipments of needed goods to the U.S., but it has been reported that China broke contracts with U.S. companies and kept goods that had been paid for by U.S. firms to fight the pandemic in their own country.”^[8] Other countries have experienced similar shortages and face supply chain risks. For some observers, this scenario raises questions about the political risk associated with long supply chains that extend across borders. As a result, governments may begin to require goods essential to health infrastructure to be manufactured in the home country, even if doing so results in higher costs of production. Businesses and governments will no longer simply consider where a product would be cheapest to manufacture; indeed, a government “may even subsidize some of the added cost as an ‘insurance policy’” against

a nation “being left short of critical goods.” And, a government may determine that it is no longer acceptable “to be dependent on China for goods that are crucial to the medical and pharmaceutical industries.”^[9]

Because goods essential to critical infrastructure, whether related to health, technology, or national security, are more likely to be sourced from home countries in the future, we may expect to see shifts in production and in trade and logistics. These shifts will move some production from the global and international to the regional, national, and local.

An increased focus on critical infrastructure, and health care infrastructure in particular, highlights a trend that is likely to accelerate post COVID-19: enhanced scrutiny of foreign investment, and increased time and costs associated with regulatory review of such transactions. The United Nations Conference on Trade and Development’s 2020 World Investment Report cites a number of pandemic-related changes to investment rules from countries around the world. In general, these changes impose additional hurdles for foreign investors seeking to invest in critical healthcare technologies, and in around 50 countries, governments have imposed regulations and restrictions on “exports of products or subproducts used in the public health response to the pandemic.”^[10]

[9] Id.

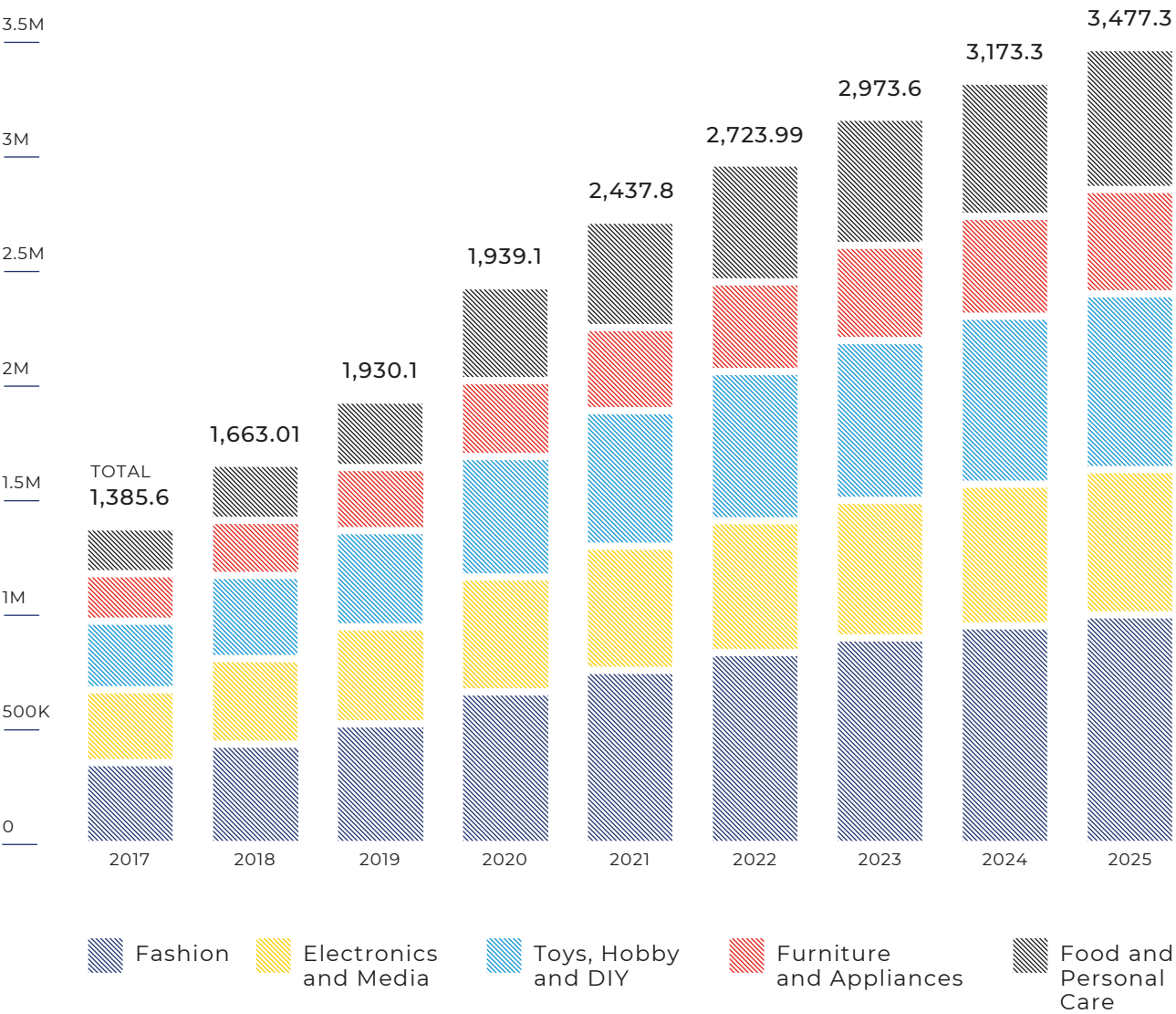
[10] United Nations Conference on Trade and Development, 2020 World Investment Report (2020), https://unctad.org/en/PublicationsLibrary/wir2020_en.pdf (citing IFC (2020), “Social bonds for COVID-19 illustrative case study”, <https://www.ifc.org/wps/wcm/connect/3d1ccd21-ad12-4468-b03d-251cd6421bc5/SB-COVID-Case-Study-Final30Mar2020-310320.pdf?MOD=AJPERES&CVID=n4RsBEk>).

[8] Skip Berry, The COVID-19 Impact on Logistics, Clarkston Consulting (May 21, 2020), <https://clarkstonconsulting.com/insights/the-covid-19-impact-on-logistics/>.

FIGURE 3

E-commerce Revenue Growth

\$billion



Source: Statista (Forecast adjusted for expected impact of COVID-19), November 2020

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The OECD has also tracked the increase in health infrastructure FDI regulations leading up to and following the COVID-19 pandemic. 20 years ago, less than 20% of OECD member countries included health infrastructure screening mechanisms in their FDI regulations. That number has increased to over 50%, and follows a general pattern of increasing FDI regulation across OECD member countries. Thus, while sovereign fund and SOE investments were increasingly scrutinized following the Global Financial Crisis, they are likely to be under even more scrutiny following the COVID-19 pandemic. As the OECD explains,

State-owned enterprises (SOEs) have taken on a more dominant role as international investors and play a much more prominent role as foreign investors than they did in 2008/2009. SOEs, particularly foreign SOEs, are viewed with suspicion as they may have non-economic motives and their explicit or implicit state-backing may secure them advantages unavailable to most privately-owned enterprises. Resulting foreign state-influence over the assets under acquisition may also shed a different light on implications for essential security interests of a proposed acquisition. The advantages that SOEs may enjoy, such as privileged access to financing, may be amplified in a situation of severe market distortions; tighter scrutiny of transactions involving SOEs may correspond to the associated higher security implication of SOE investments.^[11]

[11] OECD, Investment screening in times of COVID-19—and beyond (July 7, 2020), https://read.oecd-ilibrary.org/view/?ref=135_135247-aj6t8nmwlr&title=Investment-screening-in-times-of-COVID-and-beyond.

The OECD has also noted a shift in the way that governments discuss foreign trade, with FDI screening viewed as a tool to be used sparingly in an otherwise “rigorously open investment environment.” That language has subtly darkened in recent years, with more references to “reciprocity”, the “end of naivety”, and a shift in language from protecting “sensitive” enterprises to protecting “strategic” enterprises. COVID-19 has accelerated this trend, with “hitherto unseen vocabulary appearing in this area of policymaking as governments have started mentioning ‘unwanted’ investment, ‘opportunistic acquisitions’ and ‘predatory acquisitions.’”^[12] These changes will have important impacts on sovereign investment in the years to come.

[12] Id.

Even for goods still brought in through existing global supply chains, the process will likely be longer and costlier. Governments are more likely to require testing and treatment of goods brought in from other countries, and this testing may create costs and bottlenecks that are likely to frustrate buyers and further accelerate a move to onshore supply chains.

More optimistically, these changes may have positive environmental effects. While perhaps transitory in nature, global lockdowns have led to decreases in pollution. In New York City, for example, carbon dioxide emissions dropped 50% in the early days of the crisis, largely due to decreased automobile usage.^[13] Similar effects were seen in Italy, China, and many other places around the world. A study in the journal Nature reported that the pandemic was expected to have modest but meaningful impacts on overall emissions around the world, with a low estimate of –4% (if activity rebounded in the summer of 2020) and a high estimate of –7% (if some restrictions remained until the end of 2020).^[14] Although the authors warn that “several drivers push towards a rebound with an even higher emission trajectory compared with the policy-induced trajectories before the COVID-19 pandemic,” a decrease in global trade and a corresponding increase national and local trade should have a modest impact on overall

[13] Matt McGrath, Coronavirus: Air pollution and CO2 fall rapidly as virus spreads, BBC (March 19, 2020), <https://www.bbc.com/news/science-environment-51944780>.

[14] Corinne Le Quéré et al., Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement, Nature Climate Change volume 10, pages 647–653 (2020).

pollution levels, as the emissions needed to transport a given item would be reduced significantly if the supply chain were on-shored.

Changes in the way people work could also accelerate a transition to a greener economy. As a World Bank report noted, the “increased shift to telecommuting and e-commerce, for instance, could durably change our habits and lead to an overall reduction in transport demand, with a direct impact on emissions.”^[15] Many cities are also promoting cycling in order to “take passengers out of crowded transit systems and facilitate social distancing. Bicycles were already making a comeback in many cities, and these policies will likely encourage a growing number of commuters to bike to work even after the virus recede.”^[16]

A number of large employers have already announced that they will allow for increased flexibility in work arrangements, with some even encouraging employees to work from home at least part of the time. Whereas Facebook once paid a \$10,000 bonus to employees for living within 10 miles of its headquarters,^[17] it now intends to allow many of its employees the opportunity to permanently work

[15] Nancy VanDyke, Transport and COVID-19: short-term chaos could bring long-term transformation, World Bank Blogs (April 30, 2020), <https://blogs.worldbank.org/transport/transport-and-covid-19-short-term-chaos-could-bring-long-term-transformation>.

[16] Id.

[17] Olivia Oran & Sarah McBride, Facebook puts a price on suburban living for employees, Reuters (December 17, 2015), <https://www.reuters.com/article/us-facebook-benefits-idUSKBN0U02P620151217>.

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from home.^[18] In his announcement to employees, Facebook CEO Mark Zuckerberg remarked that “It’s clear that Covid has changed a lot about our lives, and that certainly includes the way that most of us work. Coming out of this period, I expect that remote work is going to be a growing trend as well.”^[19] Facebook followed two other prominent tech companies, Twitter and Square, in making permanent shifts to a telecommuting option for its employees.

Google’s parent company Alphabet also announced that it intends to keep most of its nearly 200,000 employees working from home until July 2021, with CEO Sundar Pinchai telling employees that he hopes the plan will provide “the flexibility you need to balance work with taking care of yourselves and your loved ones over the next 12 months.” Long term, Mr. Pinchai states that the company is “still learning a lot from our experiences of working from home and will use that knowledge to inform our approach to the future of work at Google.”^[20] A March 2020 survey by Gartner, Inc. revealed that 74% of its 317 surveyed chief financial officers and finance leaders intended to move at least 5% of their previously on-site workforce to permanently remote positions post-COVID 19.^[21] Some companies are anticipating large shifts to remote working, with 25% estimating that 10% of their employees will remain permanently remote,

17% estimating that 20% will remain remote, and 4% estimating that 50% of their employees will remain remote post-pandemic.

While teleworking has been a necessity in response to governmental lockdown orders, it may become more acceptable post-pandemic if productivity remains stable or only decreases slightly, as mild productivity losses can be weighed against cost savings from telework arrangements. The early results are mixed, with a Japanese study, for example, reporting a decrease in self-reported worker productivity,^[22] while a US poll found short term gains in productivity.^[23] In most cases, however, telework conditions have not been ideal, and working in a makeshift home office may not provide a fair point of comparison against normal in-office work.^[24]

[21] Gartner Inc., Gartner CFO Survey Reveals 74% Intend to Shift Some Employees to Remote Work Permanently (April 3, 2020), <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-survey-reveals-74-percent-of-orgs-to-shift-some-employees-to-remote-work-permanently>.

[22] Morikawa, M. (2020), COVID-19, teleworking, and productivity, VoxEU.org, <https://voxeu.org/article/covid-19-teleworking-and-productivity> (accessed on 17 June 2020).

[23] Ozimek, A. (2020), The Future of Remote Work, Upwork, <https://www.upwork.com/press/economics/the-future-of-remote-work/> (accessed on 17 June 2020).

[24] The OECD notes that “in the short term, compared to the pre-crisis period, the exceptional conditions in which telework was implemented may well have lowered productivity for those who were able to work from home.” But as emphasized by Nick Bloom, a telework researcher, “[w]e are home working alongside our kids, in unsuitable spaces, with no choice and no in-office days. This will create a productivity disaster for firms.” OECD, Productivity gains from teleworking in the post COVID-19 era: How can public policies make it happen? (July 15, 2020), <http://www.oecd.org/coronavirus/policy-responses/productivity-gains-from-teleworking-in-the-post-covid-19-era-a5d52e99/> (citing Gorlick, A. (2020), The productivity pitfalls of working from home in the age of COVID-19, Stanford News, <https://news.stanford.edu/2020/03/30/productivity-pitfalls-working-home-age-covid-19/>).

Other anecdotal reports, however, suggest that some employers, including Morgan Stanley, Barclays, and Twitter, did not suffer from a reduction in productivity in the shift to remote work due to COVID-19 lockdowns.^[25] But, as pointed out in an IPE report, even if there are no significant short-term shifts in productivity, there may be other long-term effects. Quoting a real estate research executive, the report notes the potential for shifts in corporate culture: “At first, everyone at home knows a company’s culture. As turnover occurs, and months become quarters and years, those workers become strangers and lose that culture.”^[26]

Likewise, there is a risk that firms may lose the “serendipity” of in-person interactions that drives innovation. Steve Jobs biographer Walter Isaacson quotes the Apple entrepreneur as remarking that “[t]here’s a temptation in our networked age to think that ideas can be developed by email and iChat. That’s crazy. Creativity comes from spontaneous meetings, from random discussions. You run into someone, you ask what they’re doing, you say ‘wow,’ and soon you’re cooking up all sorts of ideas.”^[27] Firms shifting to increased teleworking arrangement must monitor for changes not just in short-term productivity, but also in long-term productivity related to creativity and innovation.

[25] Vanessa Drucker, Offices: Nine-to-five no more, IPE Real Assets (July/August 2020), <https://realassets.ipe.com/office/offices-nine-to-five-no-more/10046554.article>.

[26] Id.

[27] Walter Isaacson, Steve Jobs (Simon & Schuster, 2011).

FROM HOTELS TO WAREHOUSES AND DATA WAREHOUSES

A shift to more telecommuting may have dramatic impacts on real estate investments. In the short term, real estate managers and investors are working to keep buildings safe and in compliance with local health regulations, and tenants may be experiencing severe business downturns because of the lockdown, resulting in missed lease payments. Longer term, the pandemic may force changes that have the potential to dramatically alter the sector. Within commercial real estate, for example, there has been a multi-year trend towards “densification” and open floor plans.^[28] However, McKinsey & Company suggests that public health officials may “increasingly amend building codes to limit the risk of future pandemics, potentially affecting standards for [heating, ventilation, and air conditioning], square footage per person, and amount of enclosed space.”^[29] The fear of prolonged close contact with others may also keep Baby Boomers in their homes longer, rather than moving to independent and assisted living facilities.

[28] McKinsey & Company, Commercial real estate must do more than merely adapt to coronavirus (April 2020), <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/commercial-real-estate-must-do-more-than-merely-adapt-to-coronavirus>.

[29] Id.

[18] Kate Conger, Facebook Starts Planning for Permanent Remote Workers, New York Times (May 21, 2020), <https://www.nytimes.com/2020/05/21/technology/facebook-remote-work-coronavirus.html>.

[19] Id.

[20] Rob Copeland & Peter Grant, Google to Keep Employees Home Until Summer 2021 Amid Coronavirus Pandemic, Wall St. Journal (July 27, 2020).

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As business travel is curtailed, businesses gain more experience with teleconferencing, and may find that it is often preferable to costly international travel. A permanent shift in travel habits would have impacts on the hospitality sector. Likewise, the onshoring trends described above will also result in decreased international travel, as businesses will have decreased need to establish and monitor international production and logistics facilities.

Changing consumer preferences, including the shift to e-commerce, will also affect real estate and real estate investments. McKinsey notes that “[c]onsumers forced to shop online because of closed malls and shopping centers may permanently adjust their buying habits for certain categories toward e-commerce.”^[30] Online shopping was trending prior to the pandemic, and this long-term trend “may accelerate even faster after the crisis—especially as many previously struggling brands are tipped over the edge into bankruptcy or forced to radically reduce their footprint.”^[31] E-commerce does not only affect the utility of retail store space, such as in shopping malls, but also has dramatic impacts on logistics space, such as warehouses and “fulfillment centers” that ship out orders. As explained by Prologis:

Online retail sales continued to require more than 3x the logistics space of brick-and-mortar sales through 2019. Online order fulfilment requires more logistics space because 100% of inventory is stored within a warehouse (vs. store shelves), which allows for greater product variety, deeper inventory levels, space-intensive parcel shipping operations, and additional value-add activities such as processing returns.^[32]

Statista estimates continued strong growth in e-commerce in the next several years, with the user penetration rate rising from about 47% in 2020 to over 60% in 2024.^[33] Revenue across a variety of categories (and especially in fashion and toys, hobbies, and “do-it-yourself”) will be built on a reliable logistics infrastructure, and will require additional investments to sustain growth.

Data infrastructure is also growing as an asset class, and is a central pillar in a world economy in which people are working, shopping, and entertaining themselves online. Data infrastructure includes all the layers of components and systems that support all these activities, including hardware, software, and cloud or managed services, servers, storage, I/O and networking along with people, processes,

and policies, as well as the “various tools spanning legacy, software-defined virtual containers, and cloud.”^[34] As one investor notes, data has been one of the fastest-growing commodities in the world, and “as people, places and objects become increasingly more interconnected, the importance of data infrastructure assets will rise.”^[35] Growth will be driven by smartphone usage, increased consumption of data, increased application of the Internet of Things, and artificial intelligence.

Case Studies in Sovereign Logistics Investment

To support a shift toward e-commerce, industrial spaces (including warehouses and manufacturing facilities) are likely to become an increasingly important asset class. Some large investors are already beginning to shift their real estate investment portfolios from hotels to both physical and data warehouses and other logistics-related investments to take advantage of these trends. And it is not only physical infrastructure that is needed; digital infrastructure is expanding as well. Indeed, many large, long-term institutional investors were ramping up their infrastructure, data infrastructure, and logistics investments prior to the outbreak of the COVID-19 pandemic.

Sovereigns, in particular, have been increasing allo-

cations to less liquid investments such as private equity, infrastructure, and real estate investments. Invesco’s 2020 survey of sovereign investors notes, for example, that COVID-19 is accelerating infrastructure investment trends, with especially heightened interest in electricity generation and transmission and communications. The survey finds that 54% and 52% of sovereigns, respectively, looking to allocate more capital to electricity generation/transmission and communications.^[36] This section reviews a few of the leading sovereign infrastructure and logistics investment programs.

NORGES BANK INVESTMENT MANAGEMENT

In late 2019 and early 2020, sovereign investors engaged in numerous high-profile logistics deals, often partnering with other large investors through joint venture arrangements. Norges Bank Investment Management (NBIM), for example, teamed up with Prologis, Inc., a leading industrial real estate firm, in a 2013 joint venture that created Prologis European Logistics Partners Sarl (PELP). The deal, valued at €2.4 billion, initially provided for equal €1.2 billion investments by NBIM and Prologis, with their first acquisition a portfolio of 49 million square

[30] Id.

[31] Id.

[32] Prologis, Inc., COVID-19 Special Report #6: Accelerated Retail Evolution Could Bolster Demand for Well-Located Logistics Space (June 2020), <https://www.prologis.com/logistics-industry-research/covid-19-special-report-6-accelerated-retail-evolution-could-bolster>.

[33] Statista, eCommerce, <https://www.statista.com/outlook/243/100/e-commerce/worldwide>.

[34] Greg Schulz, What’s a data infrastructure? NetworkWorld (17 February, 2017), <https://www.networkworld.com/article/3171257/whats-a-data-infrastructure.html>.

[35] Rich Miller, Global Investors See ‘Compelling’ Opportunity in Data Infrastructure, Data Center Frontier (25 July, 2019), <https://datacenterfrontier.com/global-investors-see-compelling-opportunity-in-data-infrastructure/>.

[36] Invesco Global Sovereign Asset Management Study 2020, <https://www.invesco.com/content/dam/invesco/igsams/en/docs/Invesco-Global-Sovereign-Asset-Management-Study-2020-Global.pdf>. The report notes that “[e]lectricity projects that help countries transition away from fossil fuels were seen as particularly desirable and a way of fulfilling ESG goals.” However, they quote an EMEA-based pension investor as remarking that “I don’t think there’s a single pension fund that doesn’t also have this theme, so it can be a challenge to source the right investments.”

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re feet of industrial space, “comprising 195 Class-A logistics facilities wholly owned by Prologis.”^[37] The initial term of the joint venture was set at 15 years, with Prologis having the ability to reduce its ownership to 20 percent following the second anniversary of closing. PELP went on to acquire, among other transactions, 1.6 million square feet of “high-quality logistics facilities and development land” in Spain in 2014.^[38]

Norges Bank and Prologis entered into a separate joint venture agreement later in 2013 to invest in US real estate. As with the PELP, the new investment vehicle, Prologis U.S. Logistics Venture, invested in a portfolio of assets owned by Prologis. Initially the fund acquired 66 U.S. logistics facilities with roughly 12.8 million square feet.^[39] The US joint venture was structured as a 55/45 partnership, with 55 percent owned by Prologis and 45 percent owned by NBIM. The next year, Prologis again teamed with large public institutional investors on the Prologis Targeted US Logistics Fund, with multi-hundred million dollar investments from the Texas Perma-

nent School Fund, the New York State Common Retirement Fund, and the Oregon Public Employees Retirement Fund, among others.^[40]

More recently, in November 2019, the NBIM and Prologis US joint venture entered into an agreement to purchase a 19 million square foot logistics real estate portfolio, consisting of 127 properties located in various US markets, including Southern California, the San Francisco Bay Area, Seattle and Dallas. As set out in the joint venture agreement, NBIM provided 45 percent of the funding (approximately 896 million dollars), while Prologis provided the 55 percent balance of the roughly \$2 billion portfolio value.^[41]

The Abu Dhabi Investment Authority (ADIA) has also entered into similar arrangements with Prologis, including joining with Prologis on a \$5.2 billion China logistics venture. In the initial venture, developed in 2011, Prologis and ADIA created the “Prologis China Logistics Venture” (PCLV). In 2019, the partners folded the PCLV into a new perpetual fund,

the Prologis China Core Logistics Fund, and created a third vehicle, Prologis China Logistics Venture 3, to develop \$3.5 billion in logistics properties across China.^[42]

GIC PRIVATE LIMITED

Singapore’s GIC Private Limited (GIC) is one of the largest real estate investors in the world,^[43] and is sensitive to the shifts brought on by the pandemic. GIC Chief Investment Officer Jeffrey Jaensubhakij, recently described how the fund is analyzing these changes: “We’re looking very carefully in ascending order of concern at offices, hotels and shopping centers with student housing somewhere in between shopping centers and hotels, and asking what is likely to be permanent damage versus cyclical. Even at the end of the recession there could be permanent damage.”^[44]

GIC’s portfolio also holds other real estate investments that are likely to perform much better post-pandemic.

Like NBIM and ADIA, GIC has also partnered with real estate firms in logistics-focused partnership arrangements. GIC recently announced a deal, for example, with ESR, a Hong Kong-based logistics real estate platform with properties in China, Japan, South Korea, Singapore, Australia and India. The joint venture launched the “ESR Australia Development Partnership (EADP),” a “develop-to-hold” logistics fund. GIC invested \$400 million in the venture, which has a target fund size of \$1 billion. As with other sovereign logistics investments, the venture was designed to not only move capital into real estate (and typically out of low-return fixed income securities), but also to take advantage of the particular trend toward logistics-concentrated real estate investment. As noted by ESR CEO Phil Pierce, “[l]ogistics over a 10-year period has moved from a neglected asset class to one that has become more and more keenly sought after and that’s predominantly been driven by the growth in e-commerce and the shift away from retail.”^[45] EADP’s first acquisition was a 79-hectare development property in South East Melbourne, which the partnership will develop into a “premium-grade logistics hub.”^[46]

[37] Prologis, Inc., Press Release, Prologis and Norges Bank Investment Management Close Euro 2.4 Billion Joint Venture in Europe (March 19, 2013), <https://ir.prologis.com/press-releases/news-details/2013/Prologis-and-Norges-Bank-Investment-Management-Close-Euro-2.4-Billion-Joint-Venture-in-Europe/default.aspx>.

[38] Prologis, Inc., Press Release, Prologis European Logistics Partners Sarl Acquires 1.6 Million Square Feet in Spain (September 2, 2014), <https://ir.prologis.com/press-releases/news-details/2014/Prologis-European-Logistics-Partners-Sarl-Acquires-1.6-Million-Square-Feet-in-Spain/default.aspx>.

[39] Prologis, Inc., Press Release, Prologis Forms \$1 Billion Joint Venture with Norges Bank Investment Management in the United States (December 13, 2013), <https://www.prnewswire.com/news-releases/prologis-forms-1-billion-joint-venture-with-norges-bank-investment-management-in-the-united-states-237009941.html>

[40] Jon Peterson, Prologis to transfer \$3bn of industrial assets to US open-ended fund, IPE Real Estate (June 28, 2017), <https://realassets.ipe.com/news/investment-vehicles/prologis-to-transfer-3bn-of-industrial-assets-to-us-open-ended-fund/10019634.article>; Jon Peterson, New York pension fund invests \$300m in expanded Prologis fund, IPE Real Assets (September 1, 2017), <https://realassets.ipe.com/news/investors/new-york-pension-fund-invests-300m-in-expanded-prologis-fund/10020483.article>; Jon Peterson, OPERF invests \$250m with Prologis after assessing industrial funds, IPE Real Assets (May 21, 2019), <https://realassets.ipe.com/news/operf-invests-250m-with-prologis-after-assessing-industrial-funds/10031253.article>;

[41] Norges Bank Investment Management, Press Release, Fund signs agreement to invest in logistics (November 25, 2019), <https://www.nbim.no/en/the-fund/news-list/2019/fund-signs-agreement-to-invest-in-logistics/>.

[42] James Hatton, Prologis Teams with ADIA to Launch \$5.2B in China Logistics Initiatives, Mingtiandi (December 5, 2019), <https://www.mingtiandi.com/real-estate/logistics/prologis-and-adia-launch-china-logistics-fund/>.

[43] David Ramil, One of the World’s Biggest Investors Warns of More Pain to Come, Bloomberg (27 July, 2020), <https://www.bloomberg.com/news/articles/2020-07-27/singapore-s-gic-reports-worst-annualized-return-since-2009>.

[44] Id.

[45] Ingrid Fuary-Wagner, ESR launches \$1 billion develop-to-hold logistics fund, Financial Review (June 24, 2020).

[46] Mars J. Mosqueda Jr., ESR and GIC Australia logistics JV acquires Melbourne site in first deal, Deal Street Asia (July 16, 2020), <https://www.dealstreetasia.com/stories/esr-melbourne-site-acquisition-197426/>.

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The fund will focus on “strategically located sites” in and around Sydney, Melbourne, and Brisbane that will “benefit from infrastructure or proposed infrastructure upgrades.”^[47]

GIC’s transaction with ESR builds on earlier (and larger) investments in logistics. In one of the larger logistics transactions of 2016, GIC acquired P3 Logistic Parks, a European logistics property firm, for €2.4 billion. More recently, GIC used its P3 investment to acquire a large portfolio of European logistics properties from affiliates of Apollo Global Management. The portfolio, valued at around €950 million, includes properties in Germany, Poland, Slovakia, Netherlands, Belgium and Austria.^[48]

GIC was also joined by China Investment Corporation in 2011 in the creation of Global Logistic Properties, which was dedicated in part to resolving a “lack of supply of modern warehousing against demand boosted by retailers reconfiguring their supply chains.”^[49] GLP was later sold to a consortium of Chinese private equity funds for \$11.6 billion in 2017.^[50]

GIC and ADIA are also investors in data infrastruc-

ture, including through an investment in Cellnex, a Spanish mobile phone tower operator and the eighth largest company on the IBEX 35 index. The company has expanded rapidly in recent years, controls over 50,000 sites across Europe, and is a “key player in a potential consolidation of the European telecoms infrastructure market.”^[51] GIC has also engaged in a joint venture with Equinix, a global leader in data centers and colocation services, with over 210 data centers in 55 markets across five continents. In the \$1.0+ billion joint venture, GIC and Equinix will develop and operate data centers in Amsterdam, London, Frankfurt, and Paris, with more locations to be developed over time. With its data infrastructure investments, GIC is positioning itself to own a stake in one of the pillars of the emerging digital world.

THE KINGDOM OF SAUDI ARABIA AND ITS PUBLIC INVESTMENT FUND

The “Vision 2030” plan of the Kingdom of Saudi Arabia (KSA) demonstrates how some countries are thinking strategically logistics and transport, and how logistics investments play a significant role in an overall development framework. The Public Investment Fund (PIF) has been tasked with helping KSA become “a global logistics hub for sectors of national interest and for industrial and consumer goods.”^[52] The plan is designed to take advantage of KSA’s geographical advantages: “Saudi Arabia is strategically located at the crossroads of the East and West along one of main trade routes in the Red Sea. The Kingdom is also ideally located near the MENA and West Africa regions, with an infrastructure that enables it to serve these markets.”^[53] The program entails a four-part strategy. First, KSA intends to transform the kingdom into a logistics hub through “an integrated plan for the required infrastructure to enable the transport and logistics sector to connect and expand the economic activity across the Kingdom.”^[54] KSA intends to expand the capacity of its existing transport and logistics facilities in order to eliminate bottlenecks and “fast-track” goods and passenger movement. KSA also seeks to streamline customs and border procedures to reduce import and export times and expenses.

Second, KSA seeks to improve mobility and quality of life within the kingdom itself through investments in transport safety, public transport systems, and energy efficiency standards that will lead to enhanced environmental sustainability.^[55]

Third, KSA seeks to improve financial sustainability through an increased focus on the financial and operational performance of its infrastructure assets. KSA will also seek to increase the participation of the private sector in “funding, developing and operating transport and logistics infrastructure by drafting and marketing concession contracts, and transparent and attractive PPP opportunities.”^[56]

Finally, KSA will implement a “new governance model” for its transport and logistics SOEs and assets; assets and enterprises will be segregated and will independently report to the Ministry of Transport.

KSA’s Public Investment Fund international has also made significant cross-border investments in the new pillars of the economy. PIF owns over 2% of Jio Platforms, an Indian digital services company and subsidiary of Reliance Industries.^[57] PIF is also

[47] Id.

[48] P3 Parks, Press Release, GIC scales up P3 logistics platform through acquisition of Maximus portfolio for ~€950 million, <https://www.p3parks.com/whats-new/company/gic-scales-up-p3-logistics-platform-through-acquisition-of-maximus-portfolio-for-950-million>.

[49] Shayla Walmsley, Sovereign wealth joint venture acquires €1.2bn Japan logistics portfolio, IPE Real Assets 21 December 2011), <https://realassets.ipe.com/sovereign-wealth-joint-venture-acquires-12bn-japan-logistics-portfolio/43489.article>.

[50] Anshuman Daga & Elzio Barreto, Chinese buyout group wins \$11.6 billion bid to buy Global Logistic Properties, Reuters (July 14, 2017), <https://www.reuters.com/article/us-glp-m-a/chinese-buyout-group-wins-11-6-billion-bid-to-buy-global-logistic-properties-idUSKBN19Z0N2>.

[51] Reuters, Abu Dhabi’s sovereign fund boosts Cellnex stake after ending pact with Benetton family (17 June 2020), <https://www.reuters.com/article/cellnex-abudhabi/abu-dhabis-sovereign-fund-boosts-cellnex-stake-after-ending-pact-with-benetton-family-idUSL8N2DU13Z>.

[52] Kingdom of Saudi Arabia, The Public Investment Fund Program (2018-2020), https://vision2030.gov.sa/sites/default/files/attachments/PIF%20Program_EN_0.pdf.

[53] Kingdom of Saudi Arabia, National Industrial Development & Logistics Program (2019), <https://vision2030.gov.sa/sites/default/files/attachments/NIDLP%20Delivery%20Plan%20-%20English%20Jan%202019.pdf>.

[54] Id. at 260.

[55] Id. at 261.

[56] Id. at 262.

[57] J. Jagannath, Jio Platforms raises ₹1.18 lakh cr so far: Here’s how the cheques poured in, LiveMint (12 July, 2020), <https://www.livemint.com/companies/news/jio-platforms-raises-rs-1-18-lakh-cr-so-far-here-s-how-the-cheques-poured-in-11594574640235.html>.

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joining other sovereign investors, including ADIA, in an investment in Jio Digital Fiber, which holds Reliance’s fiber optic assets.^[58]

The shift to logistics investments is part of a larger trend of increased sovereign investment in physical and data infrastructure assets. As has been noted in previous editions of this report, sovereigns are attracted to infrastructure investments because of a unique combination of deep pockets and longtime horizons. PWC estimates that infrastructure investments made up about 3.3% of SWFs’ total portfolios in 2016, with capital maximization funds investing about 12% and development funds investing 46%, respectively, of their alternatives portfolios in infrastructure investments.^[59] Competition for high performance, high profile infrastructure investments is “fierce”; London’s Gatwick and Heathrow airports are both owned by investment consortia that include sovereign funds or state-owned enterprises, for example. Shifts in trading patterns may result in changes in logistics and infrastructure investments, however, with an increased focus on the “local” at the expense of the “global.”

[58] Sanchita Dash, Mukesh Ambani is not done – Jio Fiber to get over \$1 billion as Abu Dhabi and Saudi sovereign funds are set to invest in Reliance InviT, Business Insider India (10 July 2020), <https://www.businessinsider.in/business/news/mukesh-ambani-jio-fiber-and-reliance-invit-set-to-raise-over-1-billion-from-abu-dhabi-and-saudi-sovereign-funds-for/articles-how/76888352.cms>.

[59] PWC, Sovereign Investors 2020: A growing force (2016), <https://www.pwc.com/gx/en/industries/sovereign-wealth-investment-funds/publications/sovereign-investors-2020.html>.

CHANGES IN THE PATTERNS OF SOVEREIGN INVESTMENT

Some sovereign wealth funds and sovereign development funds are adapting to changes in the world economy by not only changing their investment allocations and Xfocus but are also changing the ways in which they invest. And, as the pandemic has accelerated shifts in logistics and ecommerce, it may accelerate another shift in the investment strategies of sovereigns and other large investors: an increasing focus on sustainable investment strategies. The COVID-19 pandemic reveals how unforeseen risks can have a massive impact on economies, and some observers see the crisis as a “wake-up call that accelerates the need for a different approach to investing.”^[60]

These changes highlight the need for sovereigns to adapt their investment practices. Technological innovations will play a central role in managing these changes. Monk and Rook’s recent work The Technologized Investor describes, for example, how recently emerged tools have the capacity to profoundly shape how investors choose and monitor investments.^[61] Artificial intelligence (AI) can help

[60] JP Morgan, Why COVID-19 Could Prove to Be a Major Turning Point for ESG Investing (July 1, 2020), <https://www.jpmorgan.com/global/research/covid-19-esg-investing>.

[61] Ashby H.B. Monk & Dane Rook, The Technologized Investor (Stanford University Press 2020), at 41.

investors by “increasing the depth of inferences they’re able to make,” and can also automate tasks that are repetitive “or for which human involvement doesn’t add much value.”^[62] AI can thus help “expand Investors’ in-house resources by increasing their effective expertise, information quality, and time efficiency.”^[63] The ability to use “big data” and “alternative data,” which they define as data that isn’t “conventionally used in investment decision making,”^[64] will also be key for large investors. Collaborative utilities, such as repositories for sharing and co-working on documents and files, integrated and flexible communication and project-management platforms, and analytical “canvases” that facilitate documentation, are also helping investors work more efficiently within their organizations, as well as facilitating collaboration with “entities outside an Investor’s organizational borders.”^[65] Finally, investors are making use of new productivity applications that help automate routine processes and search for and retrieve information.^[66]

[62] Id.

[63] Id.

[64] They offer as examples of “alt-data” satellite imagery of commercial or economic activity, social media activity, microdata on consumer activity, such as credit card purchases, scraped internet data, such as job postings, and “data exhaust,” the “assortment of log files, cookies, and other digital footprints created by people’s online browsing.” Id. at 43-44. Alt-data is best exploited through AI, and Monk and Rook expect “the sharpest gains in the depth of inference Investors can make will come from combining alt-data and AI in creative new ways.” Id. at 46.

[65] Id. at 47.

[66] Productivity applications can help investors to “more precisely and exhaustively search for new investment opportunities,” so that investors could “more productively distribute their efforts in portfolio construction and asset sourcing.” Enhanced search capabilities could also allow investors to “more easily synthesize new data, information, and knowledge from what already exists in their organization.” Id. at 49.

CONCLUSION

The COVID-19 pandemic has been a worldwide catastrophe, with profound implications for the economies of the world that will likely be felt across generations. The pandemic has been both a tipping point and an accelerator for permanent changes in the way we eat, shop, and work. All of these changes will bring opportunities, however, and sovereigns are working to both take advantage of these changes to secure investment gains for their portfolios as well as to effect permanent changes in their economies to support development over the long term. Online stores are replacing shopping malls, and the logistics infrastructure is expanding to support this shift. Meanwhile, however, supply lines are shortening, and countries are expanding regulations to ensure they retain access to critical production and resources.



LATIN AMERICA AND THE CARIBBEAN SWFS: FROM FIGHTING THE COVID-19 TO UNVEILING STRATEGIC OPPORTUNITIES¹

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The effects of the Covid-19 crisis in Latin America will stay in the region for the coming years. That is the conclusion of an ECLAC report released in October 2020. By March 2020, only a quarter of the population in the region was able to work from home. Thus the “stay-at-home” policies extensively applied in the region, to reduce mobility and prevent the spread of the virus, have had a tremendous impact on 76% of the workforce in the region. Almost 45% of jobs are in contact-intensive sectors (like restaurants, retail stores, or public transportation), compared to just over 30% for emerging markets. Moreover, more than half of the population has no medical coverage, in the midst of this world pandemic. Additionally, the pandemic effects are paired with the decline of a key commodity in the region: oil, with prices declining more than 26% since the beginning of the year and affecting key producers like Brazil, Mexico, Venezuela and Colombia. The result of these factors is that poverty rates can go back to 2005 levels, and extreme poverty could reach almost 20% in the region.

The efforts made by Latin American governments to fight back the medical, economic and social crisis amounted to 8% of the regional real GDP, as of November 2020^[2]. Direct cash transfers to households along with tax cuts to businesses led fiscal responses in the region. Measures to maintain employment relationships, such as payroll support and fi-

nancing of working capital were important to avoid the closure of otherwise viable businesses, reduce long-term unemployment, support the recovery, and increase potential growth.

Within those extraordinary measures, Latin American countries have issued new debt (the debt to GDP ratio is expected to grow 10 percent points in one year), financed credit institutions and withdrawn resources from sovereign stabilization funds. Every effort is needed, given the region is expected to be the hardest hit by Covid-19 in the developing world^[3]. The burden of such fiscal imbalances should be considered seriously going forward, once uncertainty about the pandemic begins to clear. To rebuild fiscal buffers should be a commitment. Despite deep recessions are expected, the IMF emphasizes that the exceptional measures taken place are mitigating the effects of the pandemic and, if fully implemented, these fiscal channels could increase the region’s level of real GDP by about 7% percent in less than a year. Another element that is helping to cushion the impact of the crises is the evolution of mineral international prices. Since January and recuperating from the big crash in March and April, copper prices are 24% higher (year-to-Dec), silver and iron ore 36%, while tin ore prices grew 15%.

Another distinctive element of the current crisis is that top creditors in the region will not be any more foreign sovereign bondholders, but instead multi-lateral organizations which facilitated these credit

[1] Javier Capapé wants to thank Alejandro González, IE SWR Fellow, for his excellent research assistance.

[2] See IMF. Regional Economic Outlook. October 2020. Chapter 4: Fiscal Policy at the Time of a Pandemic: How Has Latin America and the Caribbean Fared? Available here: <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere#Ch4>

[3] <https://www.santander.com/en/press-room/insights/the-future-of-latin-america-after-Covid-19>

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lines. Due to the international financial facilities approved for the region, countries in the region are witnessing a rebalancing of their international creditors. In particular, the IMF approved 17 loans since the pandemic began to countries in the region, for a total US\$5.2 billion^[4], this represented 20% of all loans approved by the IMF in the same period ending in June 2020. Additionally, access to a Flexible Credit Line was approved for Chile and Peru and renewed for Colombia. Together with Mexico, the total backstop provided to the region through the Flexible Credit Line amounts to US\$107 billion recovery lines^[5].

In this chapter we analyze first the impact of the Covid-19 in the region and show how countries which had maintained prudent fiscal positions and instruments over the last decade were better prepared to face this pandemic. How much of these sovereign buffers have been used during the crisis? In which way sovereign wealth funds helped to alleviate the economic effects of the Covid-19 crisis? What can be learnt? In the second part of the chapter, we will focus on how using the SWFs not only to mitigate the impact of the virus but also on how to adapt the productive models to avoid such impacts in the future, as well as to catalyze opportunities and attract investments through SWFs.

[4] We use US\$ as the sign for the United States dollars to distinguish it from many other currencies in the region which use \$ (Mexico, Chile, Colombia, etc.). In the rest of the report, US\$ are represented just by the \$ sign.

[5] See <https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOU-pdateJune2020> and the summary of the Latin America and Caribbean region here <https://blogs.imf.org/2020/06/26/outlook-for-latin-america-and-the-caribbean-an-intensifying-pandemic/>

TABLE 1

Latin American Sovereign Wealth Funds vs Covid-19

Sovereign fund	Country	AuM (US\$bn) (PRE COVID-19)	AuM (US\$bn) (POST COVID-19)	Covid-19 measures (in US\$bn)	Covid-19 withdrawals (as % of total AuM) (PRE COVID-19)
Fondo de Estabilización Económica y Social	Chile	14.19	9.7	3.10	22%
Fondo de Reserva de Pensiones	Chile	10.44	11.20	Contributions suspended	N/A
Heritage and Stabilization Fund	Trinidad and Tobago	6.01	5.8	0.98	15%
Fondo de Estabilización Fiscal	Peru	5.47	0.001	5.77	105 %
Fondo de Ahorro y Estabilización	Colombia	3.70	0.47	3.23	87%
Fondo Mexicano del Petróleo	Mexico	1.04	1.09		
Fondo de Ahorro de Panamá	Panama	1.35	1.40	0.19	14%
Fondo de Estabilización Macroeconómica	Venezuela	0.003	0.003	0.00	N/A
Natural Resources Fund	Guyana	N/A	0.14	0.00	N/A
Savings and Stabilization Fund	Suriname	N/A			
TOTAL		42.20	29.90	13.27	

Source: Sovereign Wealth Research (IE Center for the Governance of Change)

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The region has 10 SWFs (although only 8 of them are in operation today: Suriname has not yet put its SWF to work and the Venezuela SWF remains inactive since 2011^[6]). Assets under management amounted to more than US\$42 billion at the end 2019. Twelve months and a pandemic later, the total AuM contracted to US\$29 billion as of June 2020. The difference, US\$13 billion, have been either committed or directly withdrawn by governments to combat the effects of the Covid-19 economic, medical and social crisis. Peru, Colombia, and Chile SWFs accumulate most of this effort with withdrawals totaling US\$12.1bn.

[6] Brazil used to have a relevant SWF (Fundo Soberano do Brasil, FSB). It was closed in 2018 after 10 years of activity. The remaining capital, \$7.1 billion, was transferred to the National Treasury to ease the country's debt burden. See https://sisweb.tesouro.gov.br/apex/f?p=2501:9:::9:P9_ID_PUBLICACAO:30123

PERU AND COLOMBIA: TESTING PRUDENT MACROECONOMICS

This section focuses first on two countries which arrived at the crisis in a healthier financial position: Colombia and Peru. These two countries are among the world's most heavily hit by the pandemic. Colombia ranks 9th in the mortality rate by Covid-19 per inhabitant worldwide while Peru is the 15th country per cases count^[7].

Colombia took very early actions to limit the spread of the virus, but the economic disruptions generated by the pandemic coupled with lower oil prices, will crystalize in the first recession in two decades. The GDP is expected to contract by 8.2% in 2020^[8] and one of the most suffering economic indicators

is the foreign direct investment. In the first nine months of the year, it fell 49.7%, compared with the year-earlier period^[9].

In March 2020, Colombia established a financial emergency vehicle to mitigate the effect of lockdowns on the economy and acquiring medical equipment and devices to combat the virus. This emergency mitigation fund, called FOME, has been financed through a variety of sources, including pre-existing public funds, charity support and the issuance of new international debt^[11]. Specifically, half of the new emergency fund has been funded through a special loan^[12] from the Fondo de Ahorro y Estabilización (FAE), Colombia's sovereign stabilization fund. FAE is getting depleted temporarily to help the national authorities fighting this exceptional situation. Almost 87% of the fund, US\$3.23bn, were exchanged to dollars and transferred to the FOME. The fund accumulated its resources during the prosperous years since its inception in 2012. And it is now serving its mission: acting as an umbrella in rainy days. And, as someone put, this year is pouring. SWFs of this type grow in the good years to be used in the bad fiscal years. The particular form of the Covid-19 crisis

made quick reaction more important than ever, and that is why having this pool of buffer capital alleviated the pressure on the fiscal balances. The country is expected to grow 4% in 2021, while the fiscal rule was suspended for two years to provide sufficient flexibility to respond to the health and economic crises. Yet, to return to macro prudence and fiscal stability is one of the main missions of these countries, and the way to follow is to rebuild the FAE again to be ready for the next crisis.

Similarly, Peru's economy is expected to contract -13.9% in 2020, the worst recession in the Western hemisphere with the exception of the Caribbean islands and Venezuela^[13]. Peru's weaker demand and longer than expected lockdown periods offset the significant effort made by the government and translated into large unemployment growth. In the case of Peru, its sovereign stabilization fund (Fondo de Estabilización Fiscal, FEF), which peaked US\$9.2bn in December 2014, have transferred 99% of its capital^[14] to a special government account after selling US\$5.29bn dollars to acquire Peruvian soles to run the emergency measures in the medical and social fronts.



COLOMBIA

Fondo de Ahorro y Estabilización (FAE)

Creation Date:	2012 (Act 1530)
Mission:	<ul style="list-style-type: none">• Stabilization of public spending over time• Intergenerational savings
Periodic Reports:	Annual, quarterly and monthly reports ¹⁰
Source of funds - ultimate:	Hydrocarbon (petroleum)

[7] Data from Johns Hopkins Coronavirus Resource Center. Available at <https://coronavirus.jhu.edu/map.html> Accessed Dec 2, 2020.

[8] IMF. 2020. Outlook for Latin America and the Caribbean: Pandemic Persistence Clouds the Recovery. Available at <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere#ch1>

[9] Nasdaq, Dec 1, 2020. <https://www.nasdaq.com/articles/colombias-current-account-deficit-shrinks-to-2.7-of-gdp-in-3rd-quarter-2020-12-01>

[10] https://www.minhacienda.gov.co/webcenter/portal/SGR/pages_fae/informemensualytrimestral20201

[11] Ministerio de Hacienda, Colombia. 2020. https://www.minhacienda.gov.co/webcenter/portal/MedidasCovid19/pages_medidas-Covid19#

[12] The loan from FAE to the Ministry of Finance is described in the Emergency Law launched on March 21st, 2020. A zero-interest rate loan to be paid back at a pace of 0.3bn per year starting in 2023. Full text of the law is available in Spanish:

<https://dapre.presidencia.gov.co/normativa/normativa/DECRETO%20444%20DEL%2021%20DE%20MARZO%20DE%202020.pdf>

[13] Venezuela averaged -23% GDP growth in the period 2017-2019, pre-Covid, and it is expected to shrink further in 2020, -25%.

[14] Diario Gestión (Sep 9, 2020). Available at <https://gestion.pe/economia/nos-quedamos-solo-con-us-1-millon-en-el-fondo-de-estabilizacion-fiscal-que-significa-ello-noticia/>

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In April 2020, Peru issued US\$3bn in new debt at historically low rates as the resources from FEF fell short of the enormous needs to assist an economy heavily hit by the lockdowns, informality and commodity prices. In November 2020, in the middle of a severe institutional crisis—Peru had 3 different presidents in just one week—the Treasury issued new debt in three tranches, one of them of ultra-long maturity (beyond 100 years) totaling US\$4bn. The confidence of international investors was manifested in the excessive demand for these bonds, which tripled the offering^[15]. This is an indirect effect of sovereign stabilization funds: they first help to build and maintain reputation of fiscal macro prudence, and secondly, mitigate the adverse effects of the fiscal imbalances by assisting in the bad years. It

looks also, that having a well ruled sovereign stabilization fund helps in restoring confidence of international investors, which supported long-term and significant debt issuances^[16]. In 2021, the country would experience the most important economic rebound among its South American peers, with GDP growth projections of 7.3%^[17].

[15] Reuters (Nov 23, 2020). Available at <https://www.reuters.com/article/peru-bono-idLTAKBN283266>
[16] The FEF is capped at 3% of the GDP. Excess resources are allocated to a special fund to redeem public debt.
[17] IMF (2020). Available at <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere#ch1>.

Thus, as in the case of FAE in Colombia, the FEF is close to running out of funds, for the good of the country today, while FAE has also served to aligning the country on a stable macroeconomic and fiscal prudent path in the past. This is why to rebuild FEF is of paramount importance in the coming years. The future looks more fragile without this specific buffer, so to build up again solid fiscal rules should be a priority for Peru too.

[18] Banco Central de Perú (2020). Available at <https://www.bcrp.gob.pe/docs/Publicaciones/Revista-Moneda/moneda-174/moneda-174-07.pdf>
[19] The IFSWF which promotes the Principles defines them as a tool “to promote good governance, accountability, transparency and prudent investment practices whilst encouraging a more open dialogue and deeper understanding of SWF activities.”

CHILE: A TALE OF TWO SOVEREIGN FUNDS
Chile has represented the image of the Latin American sovereign wealth community for many years. The inclusion of the Chilean funds in the original association of SWFs (originally known as the IWG, then transformed into the IFSWF) explains partially this pre-eminence. Also, the fact that the most important document on SWFs, “the Santiago Principles”, was named after Santiago de Chile, which hosted the meeting to launch this influential set of 24 principles guiding the best practices in the sovereign investment community since then.^[19]



PERU

Fondo de Estabilización Fiscal (FEF)¹⁸

Creation Date:	1999 (Fiscal Prudence and Transparency Law)
Mission:	Stabilization of public spending
Periodic Reports:	Annual balance sheets
Source of funds - ultimate:	Mining (copper), privatizations, licenses



CHILE

Fondo de Estabilización Económica y Social (FEES)²²

Creation Date:	2006 (Decree-Law 1) ²³
Mission:	• Stabilization of public spending • Protection against copper prices volatility
Periodic Reports:	Annual, quarterly and monthly reports
Source of funds - ultimate:	Mining (copper)

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Chile suffered a multiple-faced crisis in 2020 at the institutional, medical, social, economic and commodity fronts. Yet, the economy is going to be among the least impacted, with a decline of 6% in 2020, and an expected recovery of 4.5% in 2021. The strong recovery in the international copper prices may explain part of the effect, copper prices grew 25% since January and more than 65% since the end of March.

Chile has two different SWFs. A particular feature shared by other countries which prefer to establish separated funds per mission. Both the Fondo de Estabilización Económica y Social (FEES) and the Fondo de Reserva de Pensiones (FRP) fulfil a stabilization role, despite recent venturing of FEES in riskier assets (listed equities). They both had served in the past as instruments for emergency resources. This time, the Ministry of Finance reported withdrawals amounting US\$3.01bn from the FEES since April. These resources will contribute to the financing of the nation’s budget, the fulfilment of an economic emergency plan, and to repay treasury’s external debt maturing in August 2020^[20]. By the end of the year, FEES total assets under management would be worth US\$9.5bn, 30% less than before the crisis^[21].

On its part, the FRP fulfils a similar role to Australia and New Zealand’s SWFs: that is, to respond to the ageing population challenge. A demographic scenario that Chile faces composed of two main characteristics: greater life expectancy and an increase in the elderly population. The mission of the FRP is to support the financing of the pension system and guarantee the pension contributions considered in the pension reform. In line with the Fiscal Responsibility Law, the FRP is increased each year by a minimum amount equivalent to 0.2% of the previous year GDP, independently of the fiscal situation. If the effective fiscal surplus is greater than 0.2% of GDP, the FRP receives a contribution equivalent to said surplus with a maximum of 0.5% of GDP³⁰. This year, due to Covid-19, it was agreed that no contributions will be made into the fund in the years 2020 and 2021. The resources will be directed to support families and SMEs^[24].



CHILE

Fondo de Reserva de Pensiones (FRP)

Creation Date:

2006 (Law 20.128)²⁵

Mission:

Provide support for financing old-age pensions and invalidity benefits

Periodic Reports:

Annual, quarterly and monthly reports

Source of funds - ultimate:

Mining (copper)

SMALLER FUNDS AND A SUBSTANTIAL MISSION: PANAMA AND TRINIDAD AND TOBAGO

Other smaller funds in the region have experienced analogous trends influenced by the prices of the underlying assets. The board of the Fondo de Ahorro de Panama (FAP) approved a transfer of US\$85 million, in its first-ever withdrawal, in July 2020 “to help support the country and the administration in their fight against the economic consequences of the Covid-19 pandemic”^[26]. The funds were used to reinforce with US\$80 million the Housing Solidarity Fund program, which entails subsidies of US\$10,000

to low-income families for the acquisition of homes worth up to US\$60,000, and to support with US\$5 million the programs of the Ministry of Health to the purchase of equipment, medical supplies and medicines, among others. Additionally, a second transfer of US\$20 million to the National Treasury was made in September 2020, with the purpose of helping the government with the purchase of Co-

[20] Chile Sovereign Wealth Funds (2020). Available at <https://old.hacienda.cl/english/sovereign-wealth-funds/news/ministry-of-finance-informs-withdrawals.html>

[21] Chile Sovereign Wealth Funds (2020). Available at <https://www.hacienda.cl/noticias-y-eventos/noticias/ministerio-de-hacienda-informa-retiro-por-us-1-090-millones-del-fondo-de>

[22] Chile Sovereign Wealth Funds (2020). Available at <https://www.hacienda.cl/areas-de-trabajo/finanzas-internacionales/fondos-soberanos/fondo-de-estabilizacion-economica-y-social>

[23] Biblioteca Nacional del Congreso de Chile (2020). Available at <http://www.leychile.cl/N?i=258298&f=2007-02-12&p=>

[24] Chile Sovereign Wealth Funds (2020). Available at <https://www.hacienda.cl/areas-de-trabajo/finanzas-internacionales/fondos-soberanos/fondo-de-reserva-de-pensiones>

[25] Biblioteca Nacional del Congreso de Chile (2020). Available at <https://www.bcn.cl/leychile/navegar?idNorma=253645>

[26] Fondo de Ahorro de Panamá (2020). Available at <https://www.fondoahorropanama.com/20-jul-2020-primer-uso-historico-del-fap-por-pandemia-de-Covid-19>

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vid-19 vaccines^[27]. The law creating the FAP establishes that transfers are conditional on the assets of the FAP not remaining below 2% of the GDP of the previous year^[28]. In July, the withdrawing of US\$85 million left FAP’s equity valued at US\$1,429 million. In September, the additional US\$20 million (excluding the investment performance in the third quarter) left the fund at US\$1,409 million, which represented 2.1% of the nominal GDP of 2019. Therefore, the limits established in the Law creating the FAP were prudently met. This shows again that the commitment made by countries with SWFs fulfils a double mission of stabilizing public finances but also of ensuring transparency and accountability in the management of the inflows and outflows of the funds. Panama is one of the three Latin American SWFs members of the IFSWF, along with Trinidad and Tobago and Guyana, which we discuss below.

Precisely, in Trinidad and Tobago, the Covid-19 crisis brought a new legislation to govern its SWF. In early March 2020, the bylaws of the Heritage and Stabilization Fund (HSF), were amended. The re-configurations now allow the government an emergency use of the HSF’s funds. Specifically, the re-

configuration allows to fast-track the withdraw of funds in three cases: declaration of a disaster area, existence of a dangerous infectious disease or oil revenue drop. T&T faced the latter two on March 2020^[29]. Accordingly, the government was planning to source US\$1.1 billion from the HSF to face a catastrophic situation helping the government’s social support plans and VAT return payments to small and medium enterprises. Until June 2020, the official figure of withdrawals from HSF was US\$680 million. Further US\$300 million were withdrawn from the HSF in August. This brought the total withdrawals to US\$980 million in 2020, within the maximum withdrawal limit of US\$1.5 billion set under the law^[30].

In the case of Mexico, between January and November 2020, the funds contributing to the Fondo Mexicano del Petróleo para la Estabilización y el Desarrollo (FMPED) fell by 53%. The drop corresponds to the collapse of international crude prices accelerated as the World went on its global lockdown between March and May 2020^[31]. FMP is the parent organization of the Reserva de Largo Plazo (Long-term Reserve) which we consider as the

[27] Fondo de Ahorro de Panamá (2020). Available at <https://www.fondoahorropanama.com/17-sep-2020-segundo-retiro-de-recursos-del-fondo-por-pandemia-de-Covid-19>

[28] Gaceta Oficial Digital (2012). Available at <https://static1.squarespace.com/static/53924649e4b010f4651fd393/t/539c8234e4b0a9f93c231e9a/1402765876939/Ley+38+de+5+de+junio+2012+-+Ley+del+FAP.pdf>

[29] The Guardian (Mar 25, 2020). Available at <https://guardian.co.tt/news/govt-draws-us11b-from-hsf-for-Covid-plan-6.2.1086813.267f0a2a85>

[30] HSF (2020). Available at <https://www.finance.gov.tt/wp-content/uploads/2020/09/Heritage-and-Stabilisation-Fund-HSF-Quarterly-Investment-Report-April-2020-June-2020.pdf>

[31] FMPED (2020). Available at <https://www.fmped.org.mx/administracion-ingresos.html>



PANAMA

Fondo de Ahorro de Panamá (FAP)

Creation Date:	2012 (Act No. 38, modified by Law 51, 2018)
Mission:	<ul style="list-style-type: none">• Stabilization in state of emergency / economic slowdown• Savings for future generations
Periodic Reports:	Quarterly financial statements
Source of funds - ultimate:	Panama Canal Authority



TRINIDAD AND TOBAGO

Heritage and Stabilisation Fund (HSF)

Creation Date:	2007 (Act of Parliament, Act 6)
Mission:	<ul style="list-style-type: none">• Stabilization from fluctuations in energy sector revenue• Savings for future generations
Periodic Reports:	Quarterly reports
Source of funds - ultimate:	Hydrocarbon (petroleum)

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Mexican SWF. The FMP is in charge of distributing the petroleum income among the various domestic agencies, specific stabilization or sectoral funds, establishing a more transparent process and facilitating coordination and accountability to the Mexican oil industry^[32]. Yet, the size of the Reserve remains small (US\$1.09bn, as of November 2020), given its assets are planned to grow only on particularly good economic circumstances (specifically, when GDP is above 4.7% or there are excessive hydrocarbon resources). None of the two conditions that would increase the asset base of the Reserve were met since November 2018 when the Reserve was established^[33]. As a result, the Reserve itself was not able to compensate the negative effects of the

crisis in the country either mitigating or adapting the Mexican economy to the Covid-19 crisis.

Suriname established its SWF in 2017^[34]. Yet, it is not operational yet. With prior experience in the oil sector, its Savings and Stabilization Fund of Suriname (SSFS) works as an extension of Staatsolie, which fulfils two roles simultaneously: national oil

[32] Cámara de Diputados del H. Congreso de la Unión (2020). The law establishing FMPED is available at http://www.diputados.gob.mx/LeyesBiblio/pdf/LFMPED_061120.pdf

[33] For information about the Reserva de Largo Plazo: <https://www.fmped.org.mx/administracion-reserva.html>.

[34] The Economist Intelligence Unit (May 18, 2017). Available at <http://gillmo-rehoeftdraad.com/suriname-approves-sovereign-wealth-fund-law/>

company and oil industry regulator. After recent relevant discoveries in 2020, expectations mounted on the division of roles between Staatsolie and the SWF-to-be SSFS. Suriname’s economy is expected to shrink by -13% in 2020. Spending from the SSFS is limited by defined rules in the event of national disasters or mining revenue income drop. A proper management of the resources and the ability to accumulate will allow Suriname’s authorities to smooth the oil price boom and bust cycle that heavily frames the prosperity of this small Dutch-speaking economy.

Guyana is the latest newcomer to the Latin American SWF club. According to ExxonMobil estimates, the total oil reserves in Guyana may reach 8 billion barrels, ahead of established oil nations like Ecuador or Angola. This vast amount of wealth would be shared among a very tiny population (there are less than 800,000 Guyanese people) making the country the largest oil per capita nation globally. To put this figure in context, the largest oil producer, Saudi Arabia, has approximately 1,900 barrels of offshore reserves per person, Guyana has 3,900. Propelled from the starting of extraction of its massive oil discoveries, Guyana is the only country expected to grow at a rate above 5% in 2020, the pandemic year. The IMF projects an annual real GDP growth of 26%, year-over-year.

Its Natural Resource Fund was established in 2019 and, currently NPF is an associate member of the IFSWF^[35], looking to ensure best practices are established. With more than US\$140 million accrued in the Natural Resources Fund^[36], the fund faces the pressure of success in a complex institutional setting. For instance, the newly elected government (March 2020) plans to revise the act that established the fund and plans not to touch the NRF until certain reforms are put in place including committees that will approve withdrawals from the fund. The NRF Acta, approved by the previous government, states conditions and circumstances for expenditure. Section 27, for example, deals with using funds for Emergency Financing, and while it speaks to the triggering condition being “the occurrence of a major natural disaster”, which refers technically to geologic phenomena such as earthquakes, floods, hurricanes, etc^[37]. The use of the NRF to serve the interests of the Guyanese people and avoid dependency will remain crucial. Guyana oil discoveries offer a tremendous opportunity to this small country, but they also open the door to the natural curse. Other examples of super rich resource-based economies like Venezuela or Angola, should be a warning for the new government. Once again, governance, transparency and accountability will play a fundamental role to drive the fund to accomplish its triple mission of stabilization, savings and sustainable development.

[35] IFSWF (2020). Available at <https://www.ifswf.org/members/natural-resource-fund>

[36] Ministry of Finance Guyana (2020). Available at <https://finance.gov.gy/natural-resource-fund/>

[37] Dpi (Jul 24, 2020). Available at <https://dpi.gov.gy/min-jordan-assures-nation-nrf-in-federal-reserve-bank-beneficial-to-guyana/>




MEXICO

Fondo Mexicano del Petróleo (FMP) – Reserva de Largo Plazo

Creation Date:	2013 (Constitutional reform)
Mission:	<ul style="list-style-type: none">• Hydrocarbon management and transparency• Savings for future generations
Periodic Reports:	Quarterly reports
Source of funds - ultimate:	Hydrocarbon (petroleum)


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SURINAME

Savings and Stabilization Fund Suriname (SSFS)

Creation Date:	2017
Mission:	Stabilization and Transparency
Periodic Reports:	N/A
Source of funds - ultimate:	Hydrocarbon (petroleum)



GUYANA

Natural Resources Fund (NRF)

Creation Date:	2019 (Natural Resource Fund Act)
Mission:	<ul style="list-style-type: none">• Stabilization• Savings for future generations• Sustainable development
Periodic Reports:	Annual and quarterly reports

VENEZUELA

The Venezuela’s Fondo de Estabilización Macroeconómica (FEM) was established in 1998. Three years later, in November 2001, the FEM reached its peak in assets under management with more than US\$7.1 billion. Since then, a quick decline in assets left the FEM with only a tenth of its resources in 2003. Since February 2011, the FEM exists only as a latent fund with US\$3 million in the coffers and no reported activity^[38]. The FEM experienced at least 10 reforms in its first 10 years^[39]. Its mandate, mission and fiscal rule, were amended, corrected and modified. One of the most important changes was set in 2005 when PDVSA (the Venezuela giant oil company) stop contributing to the fund, reducing substantially the


linkage of FEM to crude oil resources and its growth projections.

Venezuela faces a resource curse like other mineral-rich countries before. With vast oil proven reserves above 300 billion barrels^[40], ranked number one in the world, Venezuela controls 25% of all the crude oil reserves in the planet. Yet, no resources were available, through FEM, to combat the Co-

[38] Banco Central de Venezuela (2020). Available at <http://www.bcv.org.ve/estadisticas/reservas-internacionales>

[39] A summary of the changes to the FIEM/FEM laws in Proeconomía (May 15, 2019). Available at <https://proeconomia.net/el-fondo-de-estabilizacion-macroeconomica-cronica-de-una-crisis-que-tuvo-alternativa-ii/>

[40] OPEC (2020). OPEC Share of Crude Oil Reserves. Available at https://www.opec.org/opec_web/en/data_graphs/330.htm



VENEZUELA

Fondo de Estabilización Macroeconómica (FEM)

Creation Date:	1998 (Official Gazette 36575)
Mission:	Stabilization
Periodic Reports:	Annual, quarterly and monthly reports
Source of funds - ultimate:	Hydrocarbon (petroleum)

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vid-19 effects or to support the diversification of the economy. International reserves peaked in December 2008 at US\$43 billion, and progressively declined too until US\$6 billion in September 2020.

The precedent examples show the relevance of fiscal macro prudence for the development of countries in the region (and globally). Building up fiscal buffers have allowed various countries (mainly Chile, Colombia and Peru) to combat the current covid-19 crisis with more available resources. Also, we identified how SWFs help to maintain and enhances the reputation of countries following a fiscal stabilization long-term plan. That is why the recapitalization of temporarily exhausted funds could be a main objective of these countries once the crisis eases and economies and societies surge again from this deep contraction. The different usage of SWFs is precisely explained below, as SWFs can be seen as tools to foster co-investments in the region and to develop strategic sectors and economic activities.

Latin American sovereign funds: opportunity for development and co-investment

LATIN AMERICA AND THE NEED TO ATTRACT INVESTMENT (FDI)

Investment is a deciding factor for economic development as it boosts aggregate demand in the short term and improves the capabilities of the productive apparatus and its environment in the medium and long term. However, Latin America has traditionally had a low investment level which has inhibited its capacity for growth and development. The investment (as a share of GDP) in the region has averaged 20% over the last 30 years (1990-2019), that is four percentage points lower than the World's average, six lower than the Middle East and Central Asia and 15 points lower than the emerging economies in Asia. According to the analysis made by the ECLAC, the minimum level of investment compatible with high growth in the long term is 25%, a threshold that has not been reached in the region in any financial year in the last three decades^[41].

To close this gap in investment and catch up with other geographical areas with a higher level of development, there are two possible sources of capital, internal savings and external savings. In Latin America, as in other middle-income regions, capital stock is essentially financed through internal savings (90%), resulting in an insufficient source.

To reach the emerging countries' average, Latin America would need to increase internal savings by 7 GDP points (about US\$360 billion), which is deemed to be practically impossible given the numerous barriers that prevent this volume of savings. These include: low income levels, a high marginal propensity for consumption and inefficient financial systems and weak capital markets.

It is therefore necessary to resort to external savings to reach the required average levels of investment that would enable Latin America to catch up with other regions with a similar level of development^[42]. Faced with this necessity, foreign direct investment (FDI) plays an essential role. Latin America has received US\$2.26 billion in FDI in accumulated terms, which makes it a very positive source of finance when it comes to integrating the Latin American economy into the world or constructing an export base. It should also be pointed out that as this is essentially long-term investment, this has enabled more stable external financing (as opposed to more volatile short-term capital that has caused sudden stop events). However, the FDI received by Latin America is clearly insufficient given the region's external capital requirements, taking into account the above-mentioned difficulties for supporting growth and development with internal savings. In this regard, it has become necessary to open new channels and means of facilitating the arrival of FDI in the region, and sovereign wealth funds could well play a central role.

SOVEREIGN FUNDS AS A LEVER FOR DEVELOPMENT AND FOR FDI ATTRACTION

In line with the activity undertaken in other countries, both advanced and middle income economies, sovereign funds could generate a knock-on effect on FDI that could increase the flow of external capital toward Latin America. This capital should be long-term oriented, to contribute both to finance industrial development policies, as well as to support infrastructure and capitalize companies of strategic interest for the different governments. As seen, the Latin America SWF industry is heavily oriented toward budget stabilization and fiscal buffer, with the exception of Brazil, whose sovereign fund was originally destined for development, although this was not then the case. With regard to this, there is a window of opportunity for a more ambitious SWF strategy that combines fiscal and development objectives and that fosters FDI attraction to Latin America. Progress toward this strategy requires significant changes in the mission, mandates, structure and working of the sovereign funds that currently operate within the region. Specifically, a combination of two original elements is required. First, SWFs need to incorporate a support objective that is specific to economic development in the fund's mission and mandate; second, there is a need to create co-investment structures together with international investors supporting the strategy. They could generate the expected knock-on effect toward the region for development purposes.

[41] Banco Interamericano de Desarrollo. 2016. Ahorrar para desarrollarse. New York: BID.

[42] Banco Interamericano de Desarrollo. 2016. Ahorrar para desarrollarse. New York: BID.

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In recent years, both elements—to promote strategic development and to establish co-investment schemes—have been integrated by SWFs in other geographies.

Sovereign development funds (SDFs), also known as sovereign strategic funds, have been in existence since the 1970s and have been extensively used for financing economic and industrial development policies. In this regard, many major SDFs have been a key function in financing economic development in their own countries. This is the case of Mubadala in the United Arab Emirates, where it played a vital role in the strategy fostering industrial development, sector diversification and decreasing dependence on hydrocarbons, implemented by the UAE's government. Mubadala has been extremely important in the financing and development of sectors such as aerospace, healthcare and renewable energies in the UAE. Their investment in the aerospace sector has been especially important as it has promoted development in this sector from scratch. As a result, Strata, a wholly owned subsidiary of Mubadala, currently supplies advanced composite aero-structures to leading aircraft manufacturers such as Airbus or Boeing. This is also the case of Temasek, the sovereign fund in Singapore, that has been pivotal in the development of numerous industries as a result of the financial support of public companies in sectors such as telecommunications, transport and airlines, participating in companies such as SingTel, ST Engineering or Singapore Airlines. But these strategies, promoted by sovereign funds and focused on economic development, are not only undertaken by major sovereign funds in high-income countries,

but also by smaller sovereign funds operating in mid-income countries with the specific objective of industrialization and economic development. This is the case of SDFs in Saudi Arabia, Senegal, Turkey, Malaysia, Kazakhstan or the newly established fund in Indonesia.

In recent years, a growing number of SWFs have developed consistent co-investment strategies with international partners. This strategy has enabled them to generate new engagements with international investors and to undertake domestic operations in a syndicated manner. These structures come into existence when the international and domestic SWFs share a long-term investment horizon. They are particularly advantageous for international investors as they facilitate diversification strategies (both geographically and of asset class), help to increase the scale (and capacity to negotiate) in their operations, and to obtain direct knowledge of local industry and regulation. This format and type of operation has been particularly significant in Europe in recent years. This has been the case of CDP Equity in Italy (formerly known as Fondo Strategico Italiano) and their alliances with Qatar or Kuwait to promote and invest in Italian exporting and manufacturing companies; in France, CDC International Capital (now integrated into Bpifrance), established alliances with Mubadala to invest in French companies; in Spain, the SOPEF (Spain Oman Private Equity Fund) an alliance between COFIDES, a public-private enterprise, and the Oman sovereign fund (OIA) is already investing in Spanish companies going global. But there are further examples in other geographical areas outside Europe. In Africa,

the Nigeria Sovereign Investment Authority (NSIA) is investing heavily in the fertilizer and ammonia industries, with the aim of reducing the dependence on hydrocarbons on which the Nigerian economy has traditionally relied. NSIA is currently identifying international investors to participate in other projects beyond agriculture including road infrastructure, healthcare or power. Other funds that are especially active in this co-investment strategy include the Russian Direct Investment Fund, Senegal's FONSI and India's National Infrastructure Investment that have a clear vocation for co-investment together with international investors to foster economic development.

Sovereign wealth funds may associate with three types of investors for the purpose of channelling and attracting FDI. These funds collaborate in investments with other sovereign funds and are usually the result of high-level agreements between governments. For example, the Moroccan sovereign fund, Ithmar Capital, established to foster the country infrastructure, attracted commitments worth US\$2.5 billion from other sovereign funds in the MENA region, such as Kuwait Investment Authority, Qatar Investment Authority, Public Investment Fund of Saudi Arabia, or IPIC (now incorporated into Mubadala). Also, SWFs are increasing the number of co-investment deals with global private equity firms such as KKR, Apollo, TPG or CVC. These firms associate with sovereign funds in a win-win relationship as private equity managers obtain patient capital as limited partnerships (and potentially access to certain deals) while SWFs gain access to investment expertise and global experience. A

particular example could be that of Apax Partners, whose shareholders include sovereign funds such as CIC, GIC, the Future Fund of Australia; other big private equity houses like Blackstone or Carlyle, have had close and long-term relationships with CIC and Mubadala, respectively. Finally, there have been co-investment agreements between sovereign funds and pension funds (mainly Canadian). Some of the most prominent and large-scale funds including Canada Pension Plan Investment Board (CPPIB), Ontario Teachers' Pension Plan (OTPP), British Columbia Investment Management Corporation (BCI), or PSP Investments, have undertaken operations with sovereign funds from China, Singapore, Qatar, Kuwait or Abu Dhabi.

AN OPPORTUNITY FOR LATIN AMERICA

The establishment of sovereign funds with a development and strategic purpose has proliferated in recent years, as has the creation of joint operations that enable the attraction of foreign capital. Both trends are shaping the evolution of the sovereign funds industry, however none of them have been utilized by sovereign funds in Latin America. The region could benefit from adopting these strategies for a number of reasons. First, as explained before, Latin America has a low level of internal savings and depends on international sources of capital to close this investment gap in comparison to other geographical areas. Second, there are numerous deficiencies affecting productivity. There is a huge deficit of infrastructures, for instance, and manufacturing productivity is quite low due to persistent low levels of innovation. SWFs tend to invest

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heavily on infrastructure and exporting companies. Third, sovereign funds may generate a call effect on other long-term investors promoting the type of FDI needed in Latin America: long term, stable and development oriented. Fourth, the existence of SDFs in the region could remove entry barriers, ease deal sourcing, and reduce legal risks, so that international investment funds can increase their exposure in the region.

Going down to the ground, there are two particular areas where Latin American SDFs could be used strategically: infrastructure and technology companies. First, according to the Inter-American Development Bank (AIDB, or BID in Spanish) data, the infrastructure investment gap in Latin America and the Caribbean is approximately 2.5% of GDP, equivalent to about US\$150 billion per year. Of all types of investment, that of infrastructure is one of the most essential for economic growth (transportation, telecommunications, energy, water or sanitation). A number of studies have revealed that insufficient infrastructure is one of the main problems that restrict development in Latin America and the competitiveness of its companies. SWFs, with US\$400 billion invested in infrastructure, have an important role to play, especially in geographical areas featuring an ongoing deficit in infrastructures. Other emerging and frontier economies have used their SDFs to catalyze investments to domestic infrastructure projects. For example, Nigeria's Sovereign Investment Authority (NSIA) played a crucial role in a gas project in which it is co-investing with the Moroccan Ithmar Capital, with the final objective of transporting gas not only to West Africa but also to

Europe. Another example is the Senegal's FONSI (Fonds Souverain d'Investissements Stratégiques) that has financed projects for residential infrastructures and special economic zones in the west of the country.

Second, Latin America business landscape is composed of micro, small and medium-sized companies, characterized by low productivity and limited capacity for innovation, whereas companies with greater capacity, where they exist, are the exception rather than the rule. The FDI inflows in the region have contributed to an increase in entrepreneurial capabilities, as its businesses are highly concentrated in primary sectors or manufacturing of weak value-added products. Given this scenario, SWFs could contribute to financing the development of more innovative businesses and to promote a larger scale entrepreneurial sector. These institutional funds are increasingly involved in investment in technology, both directly and especially through venture capital funds, for the purpose of diversifying portfolios, obtaining returns on investment and access to innovative business models and disruptive technologies. Only in 2018 these funds participated in investment rounds amounting to US\$30 billion, that represented 9% of the total venture capital funds invested that year. SWFs such as Temasek, GIC, Mubadala, the Australia Future Fund, or ADIA invest regularly both as limited partners of venture capital funds (the most visible case being the Softbank's Vision Fund in Japan, with the participation of Mubadala and the Public Investment Fund) or directly in companies, although in late-stage and high-volume investment rounds. The sectors

preferred by sovereign funds when participating in venture capital rounds include biotechnology, e-commerce, fintech, energy, mobility and artificial intelligence. Public funds are sometimes structured to enable the entry of third-party investors in such a way that syndicated technological investment is generated in domestic companies. This is the case of the Irish sovereign fund ISIF that created a fund for investment in technological companies with China Investment Corporation (CIC) amounting to 150 million dollars. SWFs in Latin America could play this strategic role supporting innovation hubs, investing in domestic and international venture capital funds, or facilitating other foreign institutional investors the access to do so and to unblock productivity and innovation growth in the region.



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SWFS IN-DEPTH. THE GREAT EXPERIMENT: CHINA INVESTMENT CORPORATION IN EUROPE AND BEYOND*

*Imogen Liu and Adam Dixon's research is part of a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 758430).

SOVEREIGN WEALTH FUNDS 2020

INTRODUCTION

When one thinks of the world's largest SWFs, the China Investment Corporation (CIC) naturally comes to mind. With almost USD 1 trillion assets under management, the CIC ranks second among global SWFs in the IE Sovereign Wealth Research Ranking 2019.^[1] Its size and the developmental trajectory of its ultimate sponsor, the People's Republic of China, has engendered equal parts fascination and scrutiny from investors, regulators and academics.

Since Opening Up and Reform in 1987, China has undergone rapid transformation, and adopted a pragmatic, experimentalist approach to economic development, best encapsulated by the idiom, 'crossing the river by feeling the stones', made famous by former Premier, Deng Xiaoping.

The CIC is a microcosm of China's experimentalist approach to economic governance. This in-depth chapter chronicles the CIC's unique story from inception 13 years ago, which is a story of organisational learning and adaptation at its core. Established in 2007, a handful of reformist policymakers and Wall Street returnees were the architects behind the CIC. Over the years, the organisation has evolved from a fledgling SWF highly reliant on external expertise to a global SWF with the capacity to move markets. More importantly, CIC is paving a

new way forward that is increasingly reflective of its unique identity.

The CIC is in many ways a hybrid entity, adaptive to China's legacy of socialism manifest in the commitment to state ownership, new industrial policy and a prioritising of national economic development, but also financialised and marketised forms of economic governance that reflect broader trends in the global economy.

A SNAPSHOT IN TIME

We first provide a broad strokes contextualisation of the CIC in 2020, in terms of its current corporate structure, growth trajectory and its distinguishing features relative to China's other SWFs, as well as the macro-economics and contentious backstory behind its establishment, which are pivotal in understanding many of the CIC's early investment decisions.

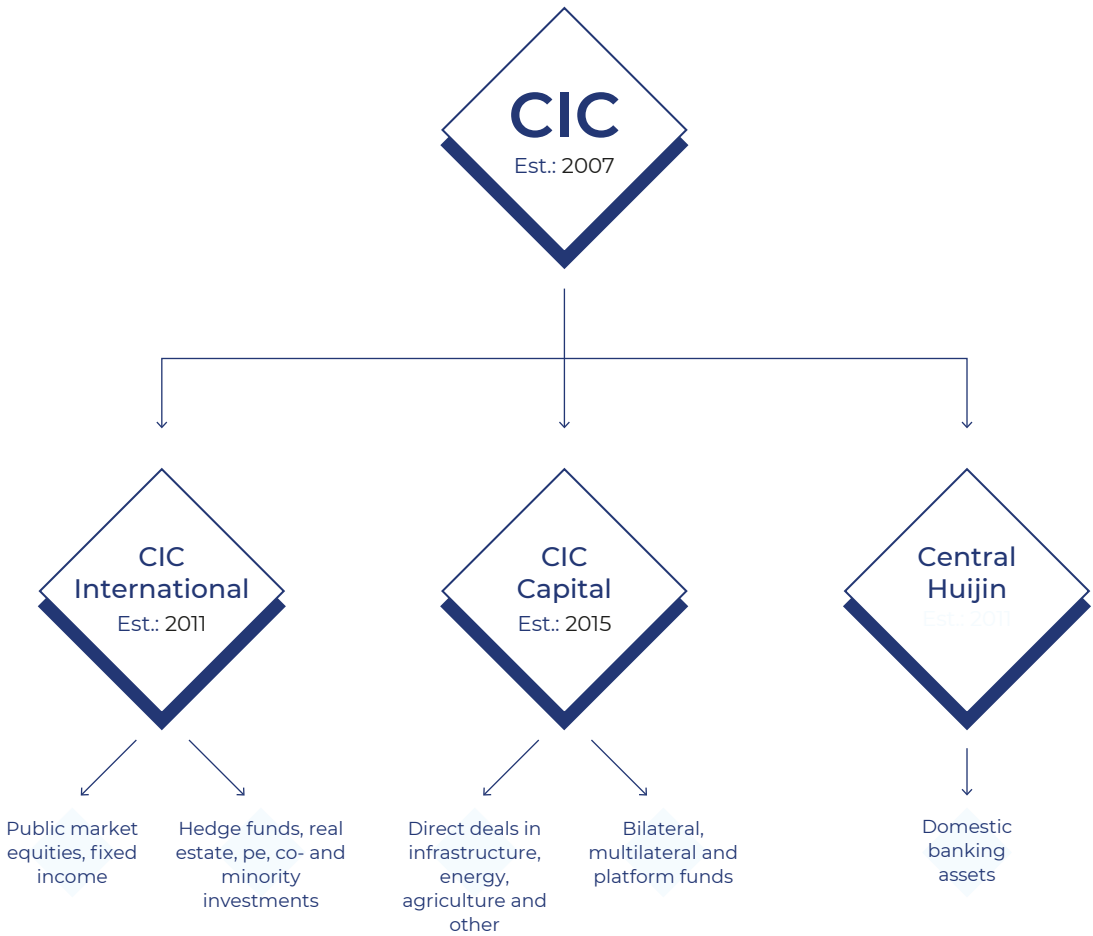
The contemporary CIC is in fact three discreet entities under one umbrella: CIC International, CIC Capital and Central Huijin. CIC International manages the SWF's public equity, fixed income, private equity (PE), minority and co-investments. CIC Capital is charged with managing the fund's direct investments in infrastructure, energy, agriculture and other forms of FDI, as well as bilateral, multilateral and platform investments. Central Huijin, for which operational firewalls are maintained from the other two entities, is a key shareholder of China's largest state-owned banks and financial institutions, including the Big Four commercial banks: Industrial and Commercial Bank of China, Agricultural Bank of

[1] Capapé, J. (Ed.). (2019). Sovereign wealth funds 2019: Managing continuity, embracing change. Center for the Governance of Change. https://docs.ie.edu/cgc/research/sovereign-wealth/SOVEREIGN-WEALTH-RESEARCH-IE-CGC-REPORT_2019.pdf

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FIGURE 1

China Investment Corporation: Organisational Structure as at 2018



Source: CIC annual report 2018. (n.d.). CIC. Retrieved 11 May 2020

China, Bank of China, and China Construction Bank Corporation.

Although the CIC is internationally regarded as a global SWF, when speaking of the CIC's global investment activities, it is to only CIC International and CIC Capital that we refer. As indicated by the distribution of staff, Central Huijin, CIC's domestic banking arm, is more than double the fund's global portfolio. Of the 689 staff at CIC as of June 2020, only 204 belong to CIC's global investment arms.^[2]

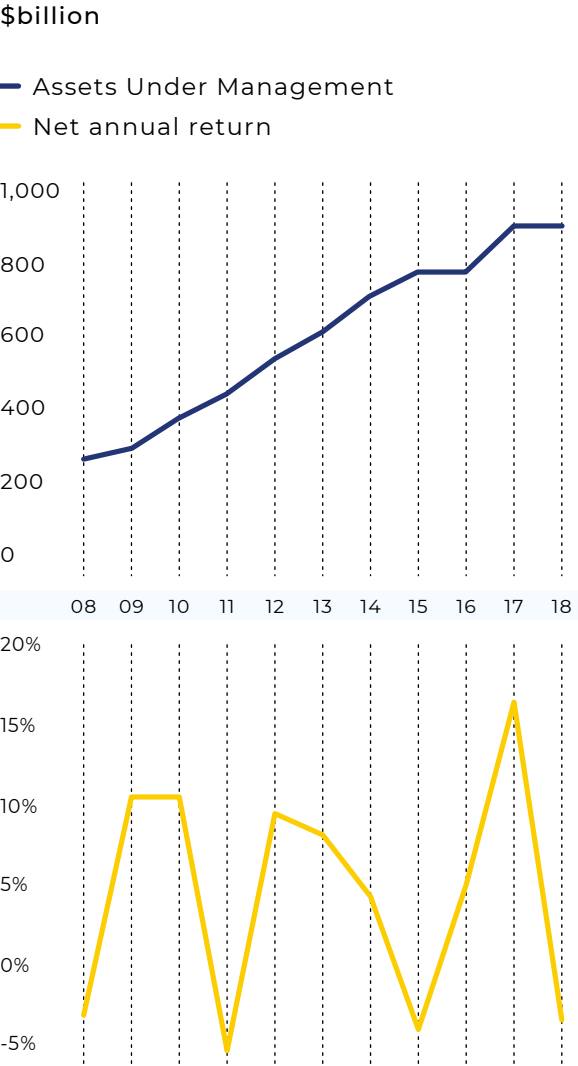
Assets under management reflects the same dynamic. The CIC's total portfolio comprises a combined USD 1,047 billion while Central Huijin (domestic portfolio) holds a combined RMB 4.7 trillion (USD 684 billion) in state-owned financial equity as of year-end 2019, approximately 40 per cent of central state-owned banking capital.

Injected with an initial 200 billion in registered capital in 2007, the CIC has realised an annualised cumulative net return of 6.13 per cent since inception. However, the ride has not been smooth. The CIC has had to contend with a poor global investment climate on the heels of the financial crisis when the CIC posted heavy losses in a number of financial acquisitions, and again around 2015 when growth plateaued.

[2] See CIC annual report, 2019. (n.d.). CIC. Retrieved 26 February 2021. from http://www.china-inv.cn/china_inv/xhtml/ztnb/2019EN/mobile/index.html

FIGURE 2

CIC assets under management and net annualised returns, 2008-2018



Source: CIC assets under management and net annualised returns in USD billions, 2008-2018

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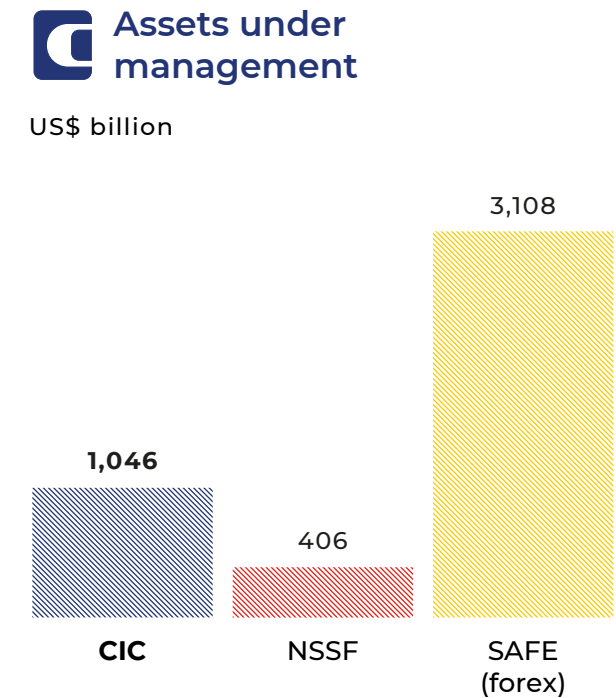
The CIC was established as a global SWF with a mandate to diversify China’s foreign reserve holdings, however the majority of holdings belong to Central Huijin, a pivotal organisation charged with managing of the state’s banking sector. To understand the CIC’s unique structure, it is important to understand the bureaucratic and macroeconomic beginnings of the organisation.

CONTENTIOUS BEGINNINGS

The CIC was born out of an inter-ministerial turf-war between the reformist central bank, the People’s Bank of China (PBOC), and the central planners, the Ministry of Finance (MOF). At the time, the State Administration of Foreign Exchange (SAFE), which regulates access to the state’s foreign exchange holdings, was administered by the PBOC, and was charged with managing the country’s growing pot of US dollars.

The CIC’s beginnings inform heavily the early attention paid to the organisation from within China and the domestic pressure on the CIC to outperform its PBOC counterpart, SAFE. The question of what to do with China’s sizeable foreign exchange reserves and subsequent increase in money supply, had spurred discussion among policymakers. China’s foreign exchange reserves had grown from just over USD 250 billion in 2001 to over USD 2 trillion in 2009. Proponents from the MOF desired more aggressive reserve management, who ultimately won out in this bureaucratic tussle and a significant portion of reserves were to be administered by a new entity, the CIC, which would manage a hefty por-

FIGURE 3



Source: Annual Reports from NSSF (2019), CIC (2019), SAFE (2019)

tion of China’s foreign reserve holdings, and with the absorption of Central Huijin, then owned by the PBOC, restructure the financial system. CIC was fully incorporated in 2007 and capitalised via a MOF special treasury bond issue of USD 200 billion to the PBOC. The interest on the bond issue was expected

to be paid out of CIC’s own coffers, creating considerable pressure for the newly established entity^[5]. Adding fuel to the fire were the regulatory rumblings taking place at the global level. The CIC among other emergent SWFs had raised concern among recipient nations including the United States (US) and the European Union (EU). Larry Summers, then US Secretary of the Treasury, had publicly called for oversight.^[6] SWFs were in the spotlight because they represented the growing significance of state capitalist countries like China, Russia and Singapore in issues of national security. Beginning in 2005, the Dubai Ports World controversy, where the United Arab Emirates-based state-owned enterprise (SOE) attempted to acquire US port management businesses at 6 major US ports, had ignited discussion within the US surrounding the national security implications of acquisitions by foreign governments. US Treasury then lead multilateral efforts that ultimately resulted in the Santiago Principles, a set of best practice principles for global SWFs, established in 2008. In the wake of these developments, the CIC was not only facing scrutiny from domestic regulators, but also internationally.

[3] See Walter, C., & Howie, F. (2012). Red Capitalism: The Fragile Financial Foundation of China’s Extraordinary Rise. John Wiley & Sons.

[4] See Norris, W. J. (2016). Chinese Economic Statecraft: Commercial Actors, Grand Strategy, and State Control. Cornell University Press. <https://muse.jhu.edu/book/45347>

[5] See Walter, C., & Howie, F. (2012). Red Capitalism: The Fragile Financial Foundation of China’s Extraordinary Rise. John Wiley & Sons.

[6] Summers, L. (2007, July 29). Funds that shake capitalist logic. Financial Times. <https://www.ft.com/content/bb8f50b8-3dcc-11dc-8f6a-0000779fd2ac>

Birds of a feather

The CIC is not China’s first nor only SWF. SAFE established a Hong Kong subsidiary in 1997, which has been actively managing a portion of the country’s foreign reserves ever since.^[3] SAFE both regulates and manages the state’s foreign reserve holdings and it is the exclusive organ designated to clear foreign currency into RMB for Chinese banks. As such, SAFE is an essential administrative step in realising projects for cross-border state-owned trade and investment. As of 2020, SAFE manages China’s official reserve assets of USD 3.2 trillion.

The other prominent SWF is the National Social Security Fund (NSSF). As its name suggests, the NSSF is primarily intended to complement the state’s social security system with conservative investment returns. Established in 2000, it is the sole SWF mandated to ensure national social security funding and relies almost exclusively on third-party assets managers. With a considerably narrower investment mandate, it differs from the CIC in terms of its ability to undertake higher risk, strategic or direct investments.^[4] As of 2019, the NSSF has over USD 406 billion in assets under management, the bulk of which is invested in domestic assets.

Relative to SAFE, the CIC is modest in size, but it is the only organ officially mandated to diversify the country’s foreign exchange holdings as a global SWF. The CIC has autonomy over its own foreign exchange, giving it significant latitude to invest overseas. Moreover, buoyed by the successful public listing of three of the Big Four banks on the Hong Kong Stock Exchange, CIC was able to use the dividend payouts from its bank holdings to offset the early losses from its global investment portfolio.

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THE HISTORY OF THE CIC

The history of the CIC can be characterised by three phases. The early years from 2007 to 2010, defined by learning, a paired-back organisational structure, and a focus on financial acquisitions. Coinciding with the global financial crisis, the CIC committed to a series of bold financial investments that reflected a willingness to take on risky projects. Next came the middle years from 2011-2014 characterised by a scaling back of the kinds of high-profile investments made in the early period. This is an era of retrenchment for the SWF, with greater attention to organisational capacity building. Around this time the CIC also ventured into new partnerships with SWFs and private institutional investors via bilateral and multilateral partnerships that resulted in a series of successful infrastructural acquisitions. Finally, in the post 2015 era, the CIC takes flight. With the establishment of CIC Capital, the SWF renewed its commitment to diverse forms of direct investment and partnerships amidst the shifting sands of China's domestic and international economic outlook. We lay out these three periods of CIC development in the penultimate sections of the chapter.

THE EARLY YEARS: 2007-2010

The period from 2007 to 2010 is characterised by a high degree of learning for the CIC. Moreover, this learning was largely based on adopting existing systems and practices. The organisation of the CIC emulated the internal structure of funds from abroad. Prior to the establishment of CIC International and CIC Capital, the structure of the organisation was much more paired back. The global portfolio was still managed under CIC as a single entity, and so meant that direct investments could be considered part of the same portfolio as public market equities and fixed income, restricting managers' discretion in pursuing direct projects that they would later have under CIC Capital.

To build capacity, the CIC adopted two major strategies. First, the organisation insourced professional talent via the recruitment of returnees and the aid of institutional peers who provided pro-bono expertise. The first chairman of the CIC, Lou Jiwei, a former MOF official, led an experienced team of senior executives, including Jin Liqun, current Chairman of the Asian Infrastructure and Investment Bank, who had served in senior positions at the Asian Development Bank, the World Bank, and the Monetary Policy Committee of PBOC prior to joining the CIC.

However, the SWF lacked a tranche of middle management that would have the required experience to build operational and investment capacity from the inside. The CIC has always maintained an active policy of recruiting returnees from abroad. In the ten years since incorporation, the number of global investment staff with overseas education or work

experience has grown from over 50 to 82 per cent.^[7] Yet the average age of global investment staff, based on 2018 figures, averages 38, reflecting the relative youth of the organisation.

The CIC tried to bridge the gap between new graduate hires and senior management by stipulating a hiring policy of a minimum of six years of relevant international experience. Another, arguably more immediate solution, was the secondment of professionals from institutional peers to the CIC. These arrangements were particularly common in the early years when CIC was heavily reliant on external expertise. They helped to build up operational and managerial capacity. CIC had reached out to a number of other banks for assistance to fill out the missing middle layer. Morgan Stanley, which CIC had acquired a minority stake in 2009, was one such partner who in 2008 tasked operational personnel to advise on the right infrastructure for the CIC. One consequence of the recommendations made was the establishment of an independent investment management operations team that would separate out the operational requirements of the SWF from the management of information technology.

The second strategy was to outsource the firm's investment management functions. In 2009, 59 per cent of CIC's global portfolio was externally managed, a proportion that has essentially stayed the same in the decade since. Working with long-stan-

ding peers like Goldman Sachs, Morgan Stanley, and HSBC as well as private equity funds like KKR, TPG, Blackstone and Carlyle Group has been critical for deal sourcing. These relationships have coalesced into several key acquisitions in the financial sector. The association with Blackstone led to one of the CIC's largest direct transactions to date. In December 2017, CIC acquired Logicor, Blackstone's European logistics portfolio, in a EUR 12.25 billion transaction.^[8]

FAILING TO TAKE FLIGHT

CIC was aggressive in acquiring financial investments from the get-go. The then new SWF was on a mission to achieve higher returns than the low yield US Treasuries of which the majority of China's dollar reserves were held in. In the spring of 2007, CIC acquired a 9.9 per cent stake in Blackstone in a USD 3 billion transaction at their peak in the PE fund's IPO, with no discount or influence, while barring the CIC from selling for four years or making similar investments for a year. Blackstone's share price fell sharply shortly thereafter, and CIC's stake value halved a year later. Similarly, CIC purchased USD 5.6 billion in mandatory convertible securities of Morgan Stanley common stock amounting to a 9.86 per cent stake, which was later followed up in 2009 with USD 1.2 billion of Morgan Stanley common stock. In contrast to the Blackstone transaction, which was concluded in a matter of weeks, the CIC was more careful in the Morgan Stanley acquisition,

[7] See CIC Annual Reports, 2008-2018, http://www.china-inv.cn/chinainven/Media/Annual_Report.shtml

[8] CIC annual report 2017. (n.d.). CIC. Retrieved 11 May 2020, from http://www.china-inv.cn/china_inv/xhtml/ztnb/2017EN/index.html

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which was preceded by months of negotiation. Nevertheless, the deal lacked the kinds of protections SWFs like Temasek and Kuwait Investment Authority received when they invested in Merrill Lynch, such as the right to receive more favourable terms if more favourable terms were extended to subsequent investors. These early forays into US banking were heavily devalued in the wake of the global financial crisis, drawing much criticism from within China where the CIC was still in the limelight in the wake of its establishment^[9]

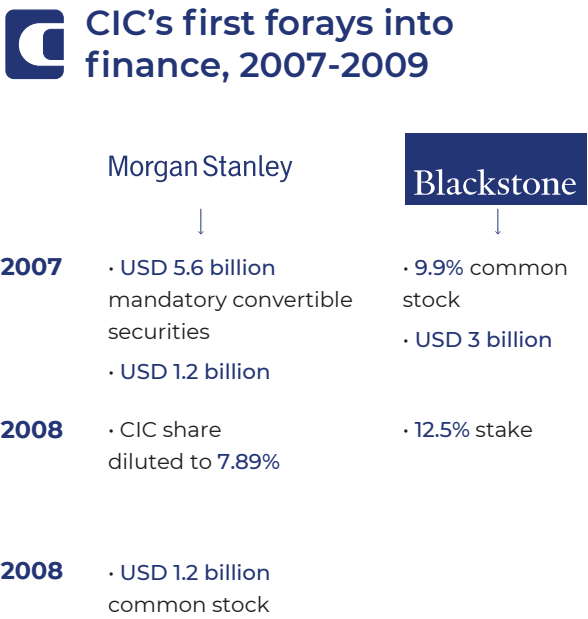
The Blackstone deal also came at a time when other state-owned banking giants were facing scrutiny from their overseas losses. China Development Bank had purchased a 3.1 per cent stake in Barclays Bank in order for Barclays to increase its offer to purchase ABM Amro.^[10] By end of 2008, Barclays share price had fallen by 70 per cent.

These early purchases were indicative of the growing pains experienced by the CIC and the pressure it was under as a fledgling organisation with USD 200 billion of public money to manage, and informed

[9] See Kwong, R. (2008, April 3). China wealth fund rebuffs critics. Financial Times (London, England). Retrieved from <https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:4S6D-FF20-TW84-P0X1-00000-00&context=1516831>; Sender, H., & Wighton, D. (2007, December 20). CIC leads the pack in race for Wall Street. Financial Times (London, England). Retrieved from <https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:m:4RD1-NST0-TW84-P03W-00000-00&context=1516831>; Sender, H. (2008, October 17). CIC plans to increase its stake in Blackstone to 12.5%. Financial Times (London, England). Retrieved from <https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:4TPD-PNF0-TW84-P1CY-00000-00&context=1516831>.

[10] Sanderson, H., & Forsythe, M. (2015). China's Superbank: Debt, Oil and Influence-How China Development Bank Is Rewriting the Rules of Finance(p. 203). <https://doi.org/10.1002/9781119199151>

FIGURE 5



Source: CIC Annual Reports, 2008 and 2009

to some extent the tone of relations with the MOF moving forward. In 2010, the CIC had requested an additional USD \$200 billion capital injection from the MOF, but that was eventually cut back by half by the MOF.

THE MIDDLE YEARS: 2011-2014

In the aftermath of the global financial crisis, the CIC sought to strengthen the foundations laid previously. If the early years of the CIC were characterised by learning through adoption and bold acquisitions in finance, the middle years were defined by a maturing of organisational capacity and a venturing into diverse forms of partnership. Such arrangements were then helpful in securing a number of energy investments reflective of policy priorities at the national level.

In 2011, the Board of Directors extended CIC's investment performance target to be based on a 10-year horizon. The extension gave the CIC latitude to restructure the organisation in a way that was more resilient and aligned with the nature of the fund as a long-term investor, and less beholden to short-term volatility and liquidity risks. The CIC established CIC International, which legally separated the SWFs global portfolio from Central Huijin. For all intents and purposes, these two entities became operationally distinct. CIC opened subsidiary offices in Toronto and Hong Kong in the same year, expanding the SWF's operations abroad, and facilitating access to local market knowhow. The opening of the Toronto office, in particular, is not without significance, given the size of Canada's mining sector and CIC's focus on energy investments in this period.

The CIC also made a number of refinements to its project cycle. The SWF streamlined its investment decision-making, inaugurated a project management system, set up a dealing room, experimented with a number of allocation and investment benchmark adjustments, and established a separate private equity investment model that would precede the establishment of CIC Capital in 2015.

PEER-TO-PEER

These kinds of organisational changes facilitated the fund's exploration of diverse forms of peer partnership that saw it leverage its size for knowledge, expertise and local knowhow brought by its partners. In 2014, CIC signed 44 deals including PE, co-investments and direct investments. These included CIC's first forays into partnerships with other SWFs in the form of bilateral government-to-government arrangements. In 2011, the CIC established the Russia-China Investment Fund together with Vnesheconombank and the Russian Direct Investment Fund and entered talks with the Belgian Federal Holding and Investment Company (SFPI) to set up a limited partnership, the China Belgium Mirror Fund. Similar discussions were held in 2014 to set up a multilateral fund with the Association of Southeast Asian Nations to promote regional investment cooperation.^[11]

[11] See CIC Annual Reports, 2011-2014, http://www.china-inv.cn/chinainven/Media/Annual_Report.shtml

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OIL, GAS, MINING AND INFRASTRUCTURE

In lieu of building up its long-term asset portfolio, the CIC prioritised direct investments in oil, gas, mining and infrastructure to ‘gear investments toward lower risk assets, such as steady return assets and resource-related assets’.^[12] The government had also prioritised energy security to meet the country’s developmental needs. SOEs like the China National Offshore Oil Corporation were making key acquisitions in oil and gas giants like Canada’s Nexen. CIC followed suit, acquired a number of energy and infrastructure assets, including a USD 3.15 billion minority investment in GDF Suez (now Engie), a 10 per cent stake in Heathrow Airport entailing board representation, and an 8.68 per cent stake in Thames Water, the UK water and wastewater company.

By 2014, direct acquisitions in these sectors became increasingly challenging as recipient countries sought to introduce tougher foreign investment regulations. The groundwork laid in establishing peer-to-peer partnerships would however pay off in subsequent years.

FIGURE 5

Key CIC deals in oil, gas, mining and infrastructure, 2011-2012

- 2011

- GDF Suez, now Engie (France): USD 3.15 billion minority investment
 - AES-VCM Mong Duong Power (Vietnam): 19% stake
 - Horizon Roads (Australia): 13.8%
- 2012

- Thames Water (UK): 8.68%
 - Sunshine Oilsands (Canada): 7.43%
 - Eutelsat Communications SA (France): 7%
 - Heathrow Airport (UK): 10%

Source: CIC Annual Reports, 2011 and 2012

CIC TAKES FLIGHT, 2015-NOW

The CIC has gradually come into its own from the period beginning 2015. Supported by government initiatives to encourage outbound investment, the CIC found new ways to overcome a challenging global investment climate via new consortium and partnership arrangements that allow it to leverage its expertise and access to the China market.

In 2015, CIC Capital was established with a mandate to manage the fund’s direct, bilateral, multilateral and platform fund investments. CIC recognises the distance to be covered to become internationally competitive. Citing Chinese companies’ poor overseas merger and acquisition (M&A) completion rate, President Tu Guangshao remarked on the need to develop a long-term, systematic overseas M&A strategy.^[13] The organisational layout of CIC Capital reflects those existing industries prioritised for direct, long-term holdings, including infrastructure, mining, energy, and agriculture. The restructuring has granted greater autonomy to the appraisal and management of direct investments, which were previously authorised under a single investment committee for CIC’s entire global portfolio. CIC Capital was set up with its own investment and management committee charged with independent decision-making from CIC International, which focuses primarily on public market and fixed income investments.

THE CIC ECOSYSTEM

In this period, CIC undertook a number of consortia deals that facilitated deal-making in priority industries. With private investors, CIC acquired stakes in European infrastructure assets. In 2015, CIC along with Allianz Capital and MEAG Munich ERGO, acquired minority stakes in Tank and Rast, a German autobahn service provider. Similarly, acquisitions like that of Danish telecoms provider TDC in 2018 typify the benefits of consortia deals where CIC can leverage the expertise of long-term global infrastructure funds like Macquarie Infrastructure and Real Assets (MIRA), as well as the local knowhow of three leading Danish pension funds.

With Chinese SOE partners like COSCO, Chinese shipping industry veterans, CIC acquired 65 per cent of Kumport, Turkey’s largest container port. Similarly, CIC put up 15 per cent of the original investment in the Silk Road Fund, a key investor in Belt and Road projects.

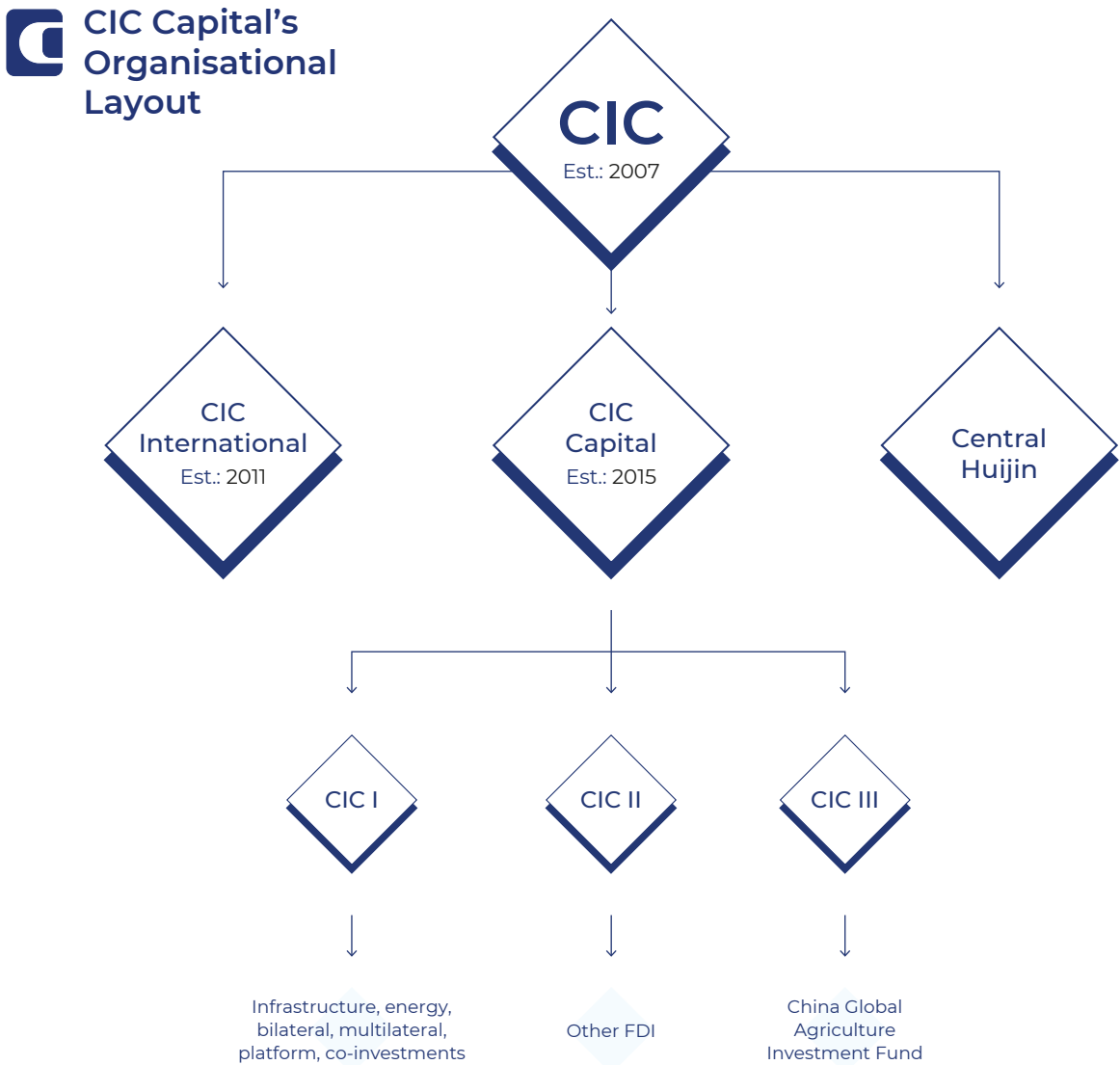
CIC also established several fund partnerships in this period to meet specific strategic objectives. The US market has always presented a challenge for the CIC in terms of direct investments. In its first ever co-GP arrangement, CIC and Goldman Sachs established the USD 5 billion China-US Industrial Cooperation Fund to target US companies with China market potential. Similarly, a partnership with the Ireland Strategic Investment Fund, called the China-Ireland Growth Tech Fund II, was established in 2018. The new fund enables CIC to take on venture capital, an area that CIC, with a minimum investment stake of USD 100 million, cannot scale in-house.

[12] CIC annual report 2017. (n.d.). CIC, p. 24. Retrieved 11 May 2020, from http://www.china-inv.cn/china_inv/xhtml/ztnb/2017EN/index.html

[13] Tu, G. (2017, May). Grasp the opportunity of ‘One Belt One Road’ construction, improve overseas investment and M&A capabilities. Contemporary Financier. http://www.china-inv.cn/china_inv//Media/2018-05/10/1000392/files/d0a3e-668b7e645c19a5c3edb629a92a4.pdf

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FIGURE 6



Source: CIC annual report 2019. (n.d.). CIC. Retrieved 11 May 2020

Most recently in 2020, CIC announced the France-China Cooperation Fund in partnership with BNP Paribas and Eurazeo with close to EUR 400 million in first round funding. Like the CIC-Goldman fund, the France-China Cooperation Fund targets companies aiming to grow in China.

These partnerships are indicative of CIC's evolving strategy in adapting to broader economic transformations at the global and domestic level. First, domestic economic policy has shifted from low-cost export-intensive development to an emphasis on indigenous innovation, technological upgrading and consumption-led growth. Second, Western countries have become increasingly difficult to penetrate owing to the tightening of foreign investment regulation and national security reviews.

CIC has sought to leverage its 'China perspective', that is, CIC's knowledge and access to the China market, to meet these dual challenges. Bilateral and multilateral funds like that of CIC and BNP Paribas are a means of Going Out, Bringing In, securing foreign expertise and access with local partners, in exchange for capital and access to the China market.

This has meant the promotion of partnerships with Chinese SOEs and financing. In 2018, CIC constructed a CIC ecosystem application to facilitate intra- and inter- organisational information sharing within the CIC group institutions, or 'Greater CIC'.

The CIC ecosystem is a '1 + 3 + N' configuration of CIC, CIC International/CIC Capital/Central Huijin, and domestic and foreign partners and Central Huijin's holding companies. The three-tiered '1 + 3 + N' configuration specifies enhanced information sharing and cooperation among the CIC international investment departments, the leveraging of CIC's international investment capabilities and domestic know-how in the interests of expanding Central Huijin's domestic holdings, and to foster cross-border business among the 'N' partners of the CIC ecosystem. Linking these CIC constituents enables the organisation to 'firmly grasp the strategic positioning of Chinese enterprises' overseas investment in order to better play the sea' (MnA Fund Annual meeting, Suzhou 2018).^[14]

[14] Tu, G. (2017, November 4). Efforts to explore the path of foreign investment in the new era. Third China M&A Fund Annual Conference, Suzhou, China. http://www.china-inv.cn/china_inv/Media/2018-05/10/1000395/files/2c6883e94f-23472784d6be9405a28129.pdf

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FIGURE 7



Source: Annual Report 2018

CIC has also sought to implement BRI policy as a means of capitalising on the ‘China perspective’. In 2015, CIC put up 15 per cent of Silk Road Fund’s initial investment, a key BRI financing vehicle. As President Tu had put it, ‘by strengthening the construction of the BRI we can expand a new way of investing abroad’.^[15]

CIC’s strategic choices in the last five years show how the SWF has evolved in a manner where it is increasingly able to harness its own institutional capacity and carve out an organisational vision that capitalises on its unique identity at the intersection of domestic and international capital.

CONCLUSION AND FUTURE SCENARIOS

The CIC has evolved, from contentious beginnings that thrust the SWF into existence, to an organisation increasingly able to forge its own strategic path. It is an organisation that has needed to adapt with the times, equipping it with the kind of resilience needed in the current investment climate.

The global economy holds unprecedented challenges for SWFs. Markets have been rocked by the spread of COVID-19 and governments globally have intervened to maintain stability. With the provision of stimulus plans, tapping of reserve funds and new bond issues comes rising protectionism against foreign investment.

In the foreground for the CIC is the ongoing US-China Trade War, which has accelerated Beijing’s efforts to reduce technological and economic reliance on the world’s largest economy without compromising the world’s reliance on China. The Chinese economy currently underpins 40 per cent of global supply chains.

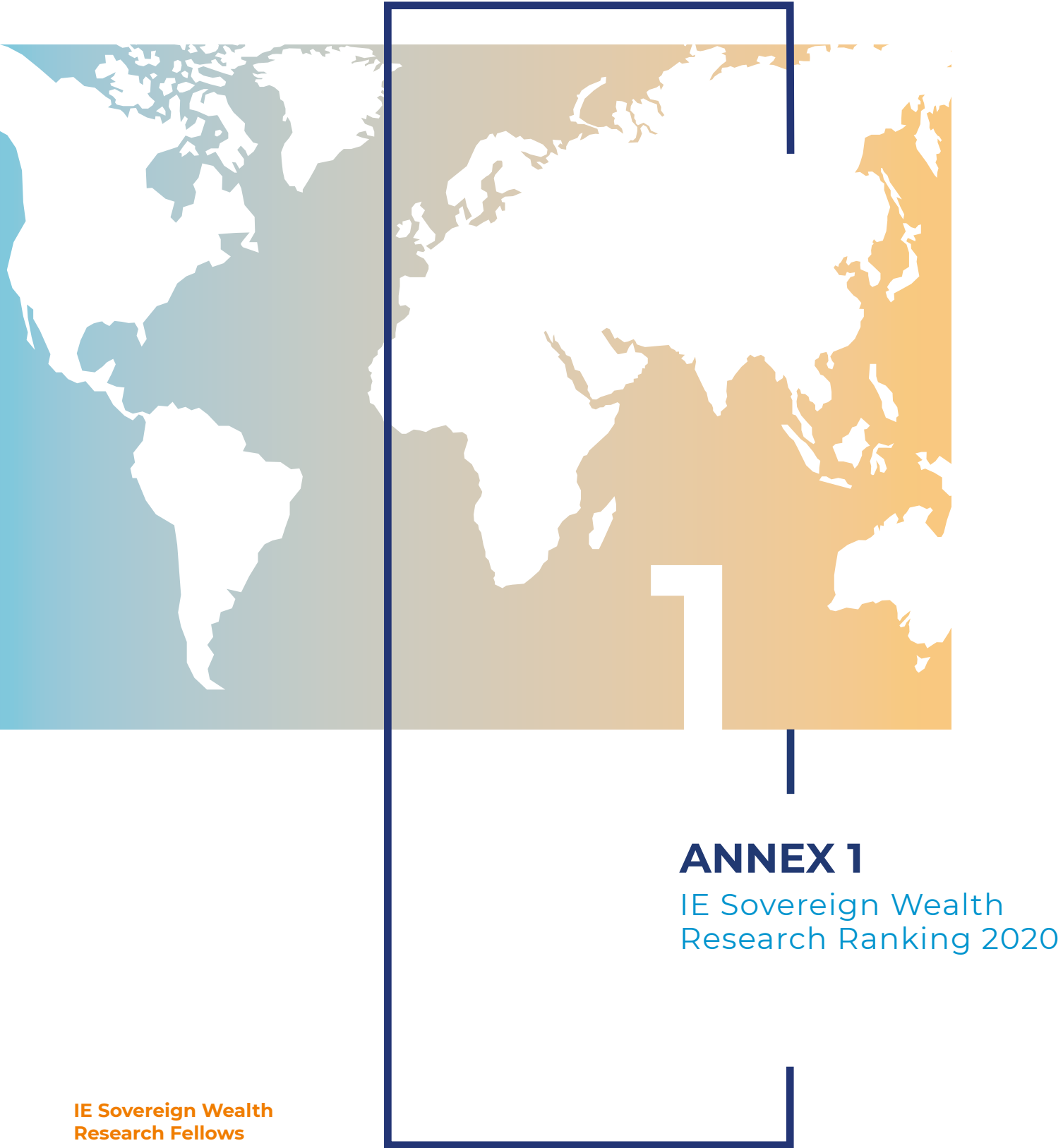
Given the current political economic landscape, we can foresee two key considerations for the CIC. First, the SWF will attempt to balance its mandate to diversify foreign exchange reserves with the current thrust of industrial policy, which favours domestic investment. This means the fund will pivot more toward its domestic portfolio and engage in partnerships and consortia deals supported by

CIC’s ‘China perspective’ that bring foreign technology to China or cultivate domestic enterprise. The CIC ecosystem is one such long-term strategy that will place the CIC on a trajectory to integrate itself deeper into the intra-state network of SOEs, state banks and funds targeting priority technologies like semiconductors and microchips.

Second, the CIC has autonomy over its own reserves. In contrast, central-level SOEs that are realising the bulk of foreign projects are heavily invested in BRI countries, which are coordinated at the government-to-government level. For the CIC, whose target markets are non-BRI countries in Europe and North America, minority stakes will be the way forward, but where the commercial terms, regulatory environment and the optics of any given transaction are equally decisive for deal making.

Uncharted waters lie ahead for SWFs. The CIC’s ability to weather the coming storm is ultimately dependent on its ability to build lasting arrangements to bridge the divide between the demands of China’s domestic and international markets.

[15] Tu, G. (2017, May). Grasp the opportunity of ‘One Belt One Road’ construction, improve overseas investment and M&A capabilities. Contemporary Financier. http://www.china-inv.cn/china_inv//Media/2018-05/10/1000392/files/d0a3e668b7e645c19a5c3edb629a92a4.pdf



SOVEREIGN WEALTH FUNDS 2020

IE Sovereign Wealth
Research Ranking 2020*

- Pre-2010 SWFs
- IFSWF members
- New SWFs (2010-2021)
- IFSWF members
- Countries Considering SWFs

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
1. Government Pension Fund Global	1,290.00	NORWAY	1990 ●
2. China Investment Corporation	1,045.70	CHINA	2007 ○
3. Abu Dhabi Investment Authority	745.00	UAE	1976 ○
4. State Administration of Foreign Exchange	743.00	CHINA	1997 ●
5. Kuwait Investment Authority	562.00	KUWAIT	1953 ○
6. Hong Kong Monetary Authority	540.17	HONG KONG SAR (CHINA)	1993 ●
7. Saudi Arabian Monetary Authority	509.40	SAUDI ARABIA	1952 ●
8. National Social Security Fund	437.90	CHINA	2000 ●
9. GIC	407.00	SINGAPORE	1981 ○
10. Qatar Investment Authority	345.00	QATAR	2005 ○

* This list includes sovereign wealth funds established as at January 2021. The IE Sovereign Wealth Research Ranking uses the most updated information available, some figures may differ from data shown in other parts of the Report.

Source: IE Sovereign Wealth Research (2021) with information obtained from funds' annual reports and websites. In their absence, we relied on estimates from Bloomberg, Global SWF, Sovereign Wealth Center.

SOVEREIGN WEALTH FUNDS 2020

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
11. Public Investment Fund	325.00	SAUDI ARABIA	1971 ●
12. Temasek Holdings	306.00	SINGAPORE	1974 ●
13. Investment Corporation of Dubai	251.57	UAE	2006 ●
14. Mubadala Investment Company	232.20	UAE	2002 ○
15. National Wealth Fund	177.61	RUSSIA	2008 ●
16. Korea Investment Corporation	137.10	SOUTH KOREA	2005 ○
17. Future Fund	99.63	AUSTRALIA	2004 ○
18. Alaska Permanent Fund	69.44	USA - ALASKA	1976 ○
19. National Development Fund	68.00	IRAN	2011 ○
20. Samruk-Kazyna	67.43	KAZAKHSTAN	2008 ○
21. Libyan Investment Authority	67.00	LIBYA	2006 ○
22. National Oil Fund of Republic of Kazakhstan	61.12	KAZAKHSTAN	2000 ●
23. Texas Permanent School Fund	46.52	USA - TEXAS	1854 ●
24. Emirates Investment Authority	45.00	UAE	2007 ●
25. Brunei Investment Agency	45.00	BRUNEI	1983 ●
26. State Oil Fund of the Republic of Azerbaijan	43.22	AZERBAIJAN	1999 ○
27. Oman Investment Authority	42.62	OMAN	2020 ○
28. Dubai Holding	35.39	UAE	1997 ●
29. Dubai World	34.06	UAE	2006 ●

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
30. Turkey Wealth Fund	33.00	TURKEY	2016 ○
31. New Zealand Superannuation Fund	30.47	NEW ZEALAND	2001 ○
32. New Mexico State Investment Council	26.96	USA - NEW MEXICO	1958 ●
33. Khazanah Nasional - Commercial Fund	17.78	MALAYSIA	1993 ○
34. Timor-Leste Petroleum Fund	17.69	TIMOR-LESTE	2005 ○
35. Alberta Heritage Savings Trust Fund	17.59	CANADA	1976 ●
36. Bahrain Mumtalakat Holding Company	16.80	BAHRAIN	2006 ●
37. Ireland Strategic Investment Fund	13.10	IRELAND	2001 ○
38. Fondo de Reserva de Pensiones	10.79	CHILE	2006 ●
39. Fondo de Estabilidad Económica y Social	10.60	CHILE	2007 ●
40. Russian Direct Investment Fund	10.00	RUSSIA	2011 ○
41. China-Africa Development Fund	10.00	CHINA	2007 ●
42. Permanent Wyoming Mineral Trust Fund	7.56	USA - WYOMING	1974 ●
43. North Dakota Legacy Fund	6.83	USA – NORTH DAKOTA	2011 ●
44. Quebec's Generations Fund	5.87	CANADA	2006 ●
45. Heritage and Stabilization Fund	5.66	TRINIDAD AND TOBAGO	2000 ○
46. Pula Fund	5.55	BOTSWANA	1994 ○
47. Bpifrance	4.67	FRANCE	2014 ○
48. National Investment and Infrastructure Fund	4.30	INDIA	2015 ○

SOVEREIGN WEALTH FUNDS 2020

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
49. State Capital Investment Corporation	3.62	VIETNAM	2006 ●
50. Gulf Investment Corporation	3.54	KUWAIT	1982 ●
51. Fundo Soberano de Angola	3.40	ANGOLA	2012 ○
52. Alabama Trust Fund	3.16	USA - ALABAMA	1985 ●
53. CDP Equity	2.89	ITALY	2011 ○
54. Idaho Endowment Fund	2.54	USA - IDAHO	1969 ●
55. Ithmar Capital	1.80	MOROCCO	2011 ○
56. Nigeria Sovereign Investment Authority	1.69	NIGERIA	2011 ○
57. Louisiana Education Quality Trust Fund	1.53	USA - LOUISIANA	1986 ●
58. Partnership Fund	1.50	GEORGIA	2011 ●
59. Fondo de Ahorro de Panamá	1.41	PANAMA	2011 ○
60. Fondo Mexicano del Petróleo - Reserva Largo Plazo	1.09	MEXICO	2015 ○
61. Western Australia Future Fund	1.00	AUSTRALIA	2012 ●
62. FONSI	1.00	SENEGAL	2012 ○
63. Indonesia Investment Authority	1.00	INDONESIA	2020 ●
64. Palestine Investment Fund	0.99	PALESTINE	2003 ○
65. Revenue Equalization Reserve Fund	0.99	KIRIBATI	1956 ●
66. Future Generations Fund	0.73	BAHRAIN	2006 ●
67. Ghana Heritage Fund	0.61	GHANA	2011 ●

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
68. National Development and Social Fund	0.57	MALTA	2015 ●
69. Fondo de Ahorro y Estabilización	0.47	COLOMBIA	2011 ●
70. The Sovereign Fund of Egypt	0.28	EGYPT	2018 ○
71. Future Heritage Fund	0.22	MONGOLIA	2019 ○
72. COFIDES	0.20	SPAIN	2018 ○
73. Agaciro Development Fund	0.20	RWANDA	2012 ○
74. Ghana Stabilization Fund	0.13	GHANA	2011 ●
75. West Virginia Future Fund	0.13	USA - WEST VIRGINIA	2014 ●
76. National Investment Corporation	0.11	KAZAKHSTAN	2012 ○
77. Intergenerational Trust Fund	0.11	NAURU	2015 ○
78. Natural Resource Fund	0.09	GUYANA	2019 ○
79. Petroleum Revenue Investment Reserve	0.09	UGANDA	2015 ●
80. National Fund for Hydrocarbon Reserves	0.08	MAURITANIA	2006 ●
81. Fund for Future Generations	0.08	EQUATORIAL GUINEA	2002 ●
82. National Wealth Fund	0.03	TURKS & CAICOS	N/A ●
83. Northwest Territories Heritage Fund	0.02	CANADA	2012 ●
84. Fonds Gabonais d'Investissements Stratégiques	0.02	GABON	1998 ●
85. Fondo para la Estabilización Macroeconómica	0.003	VENEZUELA	1998 ●
86. Fonds de Stabilisation des Recettes Budgétaires et Réserves pour Générations Futures	0.002	REPUBLIC OF THE CONGO	2005 ●

SOVEREIGN WEALTH FUNDS 2020

Sovereign Wealth Fund	Assets under Management (\$bn, US dollars)	Country	Established
87. Fondo de Estabilización Fiscal	0.00	PERU	1999 ●
88. Permanent Fund for Future Generation	N/A	SÃO TOMÉ E PRÍNCIPE	2004 ●
89. National Investment Fund	N/A	CYPRUS	2019 ○
90. Oil Revenue Stabilization Fund	N/A	SOUTH SUDAN	2008 ●
91. Turkmenistan Stabilization Fund	N/A	TURKMENISTAN	2008 ●
92. Zimbabwe Sovereign Wealth Fund	N/A	ZIMBABWE	2014 ●
93. Papua New Guinea SWF	N/A	PAPUA NEW GUINEA	2011 ●
94. Savings and Stabilization Fund	N/A	SURINAME	2017 ●
95. Fund for Israel Citizens	N/A	ISRAEL	2014 ●

Total Assets under Management	\$9.07 trillion
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Potential new funds**

96. South Africa	SOUTH AFRICA	●
97. Lebanon	LEBANON	●
98. Kenya	KENYA	●
99. Mozambique	MOZAMBIQUE	●
100. Namibia	NAMIBIA	●

Sovereign Wealth Fund	Country	Established
101. Bahamas	BAHAMAS	●
102. Romania	ROMANIA	●
103. Japan	JAPAN	●
104. Mauritius	MAURITIUS	●
105. Zambia	ZAMBIA	●
116. Tanzania	TANZANIA	●
107. Liberia	LIBERIA	●
108. Saskatchewan	CANADA	●
109. Bangladesh	BANGLADESH	●
110. New Caledonia	NEW CALEDONIA	●
111. United Kingdom SWF	UNITED KINGDOM	●
112. Investment and Development Fund	MACAU SAR (CHINA)	●
113. Philippines	PHILIPPINES	●
114. Hong Kong	HONG KONG SAR (CHINA)	●
115. Taiwan	TAIWAN (PROVINCE OF CHINA)	●
116. Mongolia	MONGOLIA	●
117. Jordan	JORDAN	●

**These 22 funds were not established when this edition went to press. The establishment is currently discussed.
Law Proposed: A law to manage the SWF has been proposed for debate, the SWF is not operational yet.



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ANNEX 2

Sovereign Wealth Funds in Spain: The growing role of the Sopef

SOVEREIGN WEALTH FUNDS 2020

Spain is one of the main destinations for foreign direct investment (FDI) in the world, ranking 11th globally, with a \$751 billion accumulated stock at the end of 2019 according to UNCTAD. The evolution of the FDI in Spain in recent years has been very positive. In 2020, the global FDI collapsed, due to the pandemic, and fell more than 42% compared to 2019, according to UNCTAD. In comparison, in the first 9 months of the year, Spain's FDI has contracted 13%, with respect to the same period in 2019. Part of this story is due to international private equity funds, which continued betting on Spain. In 2020, even in the midst of the pandemic, Spain registered the third best year in historical terms with investments that amounted to €5.5 billion. Particularly interesting is the evolution of the venture capital segment, where foreign funds represent now 70% of the total investment in startups, and that in 2020 exceeded its historical record.

Sovereign wealth funds have increased their operations with Spanish companies between January 2019 and September 2020. At least 9 different sovereign funds invested in Spanish companies. In these 21 months, sovereign wealth funds made 12 direct investments valued at €1.3 billion. The sovereign investment pace in the country is maintained compared to the 2019 Report, demonstrating significant resilience in a year marked by the pandemic and the entry barriers to state-backed foreign capital throughout the European Union. Among the operations, the 4 carried out by Sopef (Spain-Oman Private Equity Fund) stand out, in addition to the alliances of Spanish companies with international sovereign wealth funds: a new one, that announced of Grifols

with the Public Investment Fund of Saudi Arabia and another consolidated and very active, that of Naturgy (through its subsidiary Global Power Generation) with the Kuwait Investment Authority.

We analyze first these two alliances. The first international alliance focuses on Grifols' core business (products derived from blood plasma) in a country undergoing a strong economic model transformation. Thus, Grifols and PIF signed a letter of intent for the joint development of plasma centers and production facilities in Saudi Arabia^[1]. The project will be articulated through a new company (joint venture) jointly owned by Grifols and PIF.

This agreement would allow Grifols to strengthen its presence in the Gulf region and, at the same time, to strengthen the health system of the Saudi Kingdom. As we have commented on previous occasions, this logic of investing-and-learning, or investment to foster development, continues to find an ally in Spanish companies. For the Spanish company, the arrival of foreign partners is also an incentive for its internationalization towards regions where business access can be more complex.

[1] Find more details at <https://www.grifols.com/es/view-news/-/news/grifols-and-the-public-investment-fund-of-saudi-arabia-to-boost-plasma-medicines-self-supply-in-the-region>

Sovereign Wealth Funds in Spain: The growing role of the Sopef

The second alliance that we highlight this year refers to the continued investment of Global Power Generation. This company is 75% owned by Naturgy and 25% by the Kuwait Investment Authority, through its subsidiary Wren House Infrastructure. GPG is activating its ambitious investment plan in new wind farms, with a particular emphasis on Australia.

This alliance was already analyzed in the 2016 Report, as it dates back to 2015. Since then, GPG’s investments have been gaining a greater role within the Spanish energy company. In the Aussie country, GPG already has an installed capacity that exceeds 700 MW and aims to manage close to 1,300 MW in the next two years, becoming one of the two most important independent producers in the country. In total, today GPG controls more than 1,360 MW in hydroelectric, solar and wind power. The commitment to renewable energy is strengthened with the sale of the natural gas distribution networks that Naturgy had in Chile, sold to the Chinese State Grid for more than €2.5 billion^[2]. This rotation of assets of many global energy companies offers numerous investment opportunities, both for the cash generated that will seek new projects related to sustainable energy, and for the change of hands of the ownership of assets in non-renewable sources.

The Grifols and GPG cases show the internationalization of the Spanish company. This is precisely the main objective of the Spanish sovereign fund Spain-Oman Private Equity Fund or, simply, Sopef. Operating since 2018, the fund is in full investment phase. In the 2020 reporting period, there have been 4 operations and another two operations are expected to close in the coming weeks. To date, Sopef has invested in four companies, from four different sectors, located in four different regions of the country. In July 2019, Sopef made its first bet and became a shareholder in Palacios^[3], the food group based in La Rioja, which has factories in the United States and Spain. Months before Sopef’s entry, in April 2019, MCH and Ardian acquired 80% of the company from Carlyle for an amount close to 250 million. MCH is the Spanish private equity firm that was awarded the public tender to manage Sopef.

A few months later, in November 2020, Sopef became a shareholder in Haizea Wind Group^[4], an international industrial group based in Bilbao, mainly dedicated to the manufacturing of wind towers and foundations for offshore towers. Among its clients, large wind power manufacturers: Vestas, Siemens Gamesa, Nordex Acciona or General Electric. Interesting is the logic of this investment from a country, Oman, which receives almost 70% of its public revenues from oil and natural gas. As in other countries in the region, the need to reduce dependence on oil and diversify the production model may explain Oman’s interest in the renewable energy sector. In addition, the sector has received both regulatory and social support, and its growth prospects are increasingly positive. For Oman, the investment allows access to the Haizea operations and learn more about a sector that will take on increasing weight also in the economies that today are fed by non-renewable resources.

The third investment, in the Valencian TCI Cutting^[5], was closed in January 2020. It is a company founded in 2001, with a leading technology in industrial cutting machinery using laser and water. It is a sector, as in the case of Haizea, very close to the technological evolution of the industry, the so-called Industry 4.0 with a very high digitization and automation component. This company is a benchmark in Europe for cutting with laser technology and its international arrival covers sectors such as aeronautics, naval, automotive or defense, among

others. The same logic of investment and learning is manifested in the case of Oman, which needs to generate a certain industrial fabric in an economy closely linked to hydrocarbons that are less and less profitable due to their extraction cost.

The fourth and last investment occurred in September 2020. Symborg^[6], founded in 2009, is based in a different Spanish region: Murcia. Sopef invested in the leader in research and development of biotechnology and agricultural innovation, with a presence in more than 50 countries. Symborg researches and develops bio stimulants and biofertilizers based on microorganisms. Again, a sector linked to the United Nations sustainability objectives, which helps to boost agricultural production and quality while reducing the use of nitrogen fertilizers. In Oman, the agricultural sector accounts for 2.5% of GDP, although until the discovery of oil in the second half of the 1960s, almost 70% of GDP was agricultural. Food security is one of the long-term investment vectors for sovereign wealth funds in countries with extreme climates and with a shortage of drinking water.

Therefore, investments in four sectors for the future: food, industry 4.0, renewable energy and biotechnology. A very good letter of presentation of the potential of the Spanish company in four different regions: La Rioja, the Basque Country, Valencia and Murcia. Showing that the international fabric and investment opportunities go beyond Madrid or Barcelona.

[2] More details at https://www.naturgy.com/Publicacion/Satellite?c=Page&childpagename=GNF%2FPage%2FGNF_GlobalLayout&cid=1477700097618&pagename=GNFWrapper

[3] See <https://www.sopef.es/es/cartera/palacios> for further details on the deal.

[4] See <https://www.sopef.es/es/cartera/haizea-windgroup> for further details on the deal.

[5] See <https://www.sopef.es/es/cartera/tci-cutting> for further details on the deal.

[6] See <https://www.sopef.es/es/cartera/symborg> for further details on the deal.

Sovereign Wealth Funds in Spain: The growing role of the Sopef

In addition to these industrial sectors, Spain witnessed the entry of sovereign capital into the real estate market, with the acquisition of Hotel Edition^[7] by an investment vehicle in the hands of GIC (Singapore) and a Dutch pension fund (APG). This fund, called Archer Hotel Capital, has among its assets the Westin Palace, also in Madrid, and the Hotel Arts in Barcelona. All in the luxury segment. The Archer group has paid € 220 million to acquire KKH, the historic property. Located in the Plaza de las Comendadoras in Madrid, it was the headquarters of the Monte de Piedad de Madrid, founded in 1702. The hotel will have 200 rooms, so the price per room paid exceeds one million euros, making this operation the most “Expensive” of Spain after Villa Magna, where the Turkish group Dogus paid 1.2 million per room. The hotel sector, key in the Spanish tourism industry, has been exposed to numerous corporate operations, given the tourism restrictions that the world has experienced and that severely affect the Spanish economy.

[7] See <https://tophotel.news/archer-hotel-capital-buys-madrid-edition-hotel/> for further details on the deal.

Institutions

**SOVEREIGN WEALTH RESEARCH - IE CENTER
FOR THE GOVERNANCE OF CHANGE**
www.ie.edu/cgc/

The Sovereign Wealth Research at the IE CGC is a research program focused on sovereign wealth. The program has proven experience and international recognition. The SWR helps to better understand the critical role of sovereign wealth funds and the transformative position they play on technology disruption, sustainable finance, economic development and corporate governance. The program produces annual reports, peer-reviewed papers in top academic journals, training programs, closed-door seminars, and open conversation spaces with sovereign wealth stakeholders.

The Center for the Governance of Change (CGC) is an applied-research, educational institution based at IE University that studies the political, economic, and societal implications of the current technological revolution and advances solutions to overcome its unwanted effects. The CGC produces pioneering impact-oriented research that cuts across disciplines and methodologies to unveil the complexity of emerging technologies such as Artificial Intelligence, Big Data, Blockchain, and Robotics, and explore its potential threats and contributions to society. Based at IE University, home of one of the top five business schools in the world according to The Economist, Forbes and The Financial Times.

ICEX
www.icex.es

ICEX Spain Trade and Investment is a public corporation at the national level whose mission involves promoting the internationalization of Spanish companies to support their competitiveness and add value to the economy as a whole, as well as attracting foreign investment to Spain. Its vision is a) to serve as a window of internationalization for Spanish companies, by collaborating with strategic partners, b) to provide high added-value services, meeting customers' needs, and c) to attract top-quality foreign investment, helping investors to enter Spain and set up activities here. ICEX Spain Trade and Investment renders its services through a network of 31 Provincial and Regional Divisions in Spain along with almost 100 Economic and Trade Offices around the world. It also boasts 16 Business Centers worldwide, offering Spanish companies temporary infrastructure and acting as incubators for internationalization.

ICEX – INVEST IN SPAIN
www.investinspain.org

Within ICEX, Invest in Spain Division's fulfills its mission with four lines of action: a) Attracting new foreign direct investment projects, especially involving countries, sectors and businesses that show greatest growth potential in Spain, b) Positioning of Spain as an internationalized country boasting extremely competitive resources, business center and international investment as well as being a global platform for access to third markets, c) Promoting an improved business climate and regulatory environment, thereby facilitating business activity in Spain, d) Facilitating collaboration between foreign investors and Spanish companies for the development and expansion of activities in our country.

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Depósito Legal: M-4521-2021
NIPO (paper): 114210190
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