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Emergence of sovereign wealth funds☆

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ABSTRACT

In this paper we show that domestic economic and political characteristics can explain why some countries established a Sovereign Wealth Funds (SWFs) and others not. We find that 1) the existence of natural resources profits, 2) the government structure and 3) the ability to invest in a socially beneficial way in the domestic economy can explain this choice. At the same time these same factors do not relate to the size of the national savings. We use a sample of countries that established a SWF in the period 1998–2008 and compare them to those that did not set up a fund in the same period. The results suggest that SWFs tend to be established in autocratically run countries that have difficulties finding suitable opportunities for domestic investments.

1. Introduction

The aggregate size of assets under management of sovereign wealth funds (SWF) has been stable over the period 2014–2016 at around US$ 7.4 trillion, with no new establishments of any (major) SWF over the last 5 years. With the maturing of these new major financial vehicles, the time has come to consider carefully what have been the political and economic forces contributing to the blossoming of SWFs over the last decades. Better understanding of what gave rise to SWFs' emergence is the roadmap of this paper and should incidentally shed some light on their potential long run developments.

Since SWFs have proven to be persistent government bodies (we are not aware of any SWF that disbanded in recent times), it is relevant to understand what factors determined their establishments. However, SWFs vary greatly in terms of asset under management, structure, management and objectives. This is not very surprising. Each country has its own internal processes that give rise to policy outcomes, such as the decision to establish a SWF (Orihuela, 2013; Yi-Chong and Bahgat, 2010). We aim to capture the broad strokes in history that can explain why 16 countries established a SWF in the period 1998–2008 and many others did not.

A number of articles have been written in normative fashion on the optimal savings decisions for countries rich in non-renewable natural resources. Economic theory advises that one should save temporary income to finance long-term investments that reap permanently higher consumption. This principle is quite strong even while one can account for various country and market specific aspects such as capital scarcity, domestic investment absorptive capacity, political heterogeneity and the volatility of resource revenue. We aim to provide evidence that these 'optimal' policies appear to have driven the establishments of SWFs. In this way, this article is

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one of the few that provides an empirical analysis on this issue (for an exception see van den Bremer and van der Ploeg, 2016).

This article tests whether the surge of SWF establishments was determined by the government structure and the ability to invest profitably in the domestic economy, while conditioning on the availability of resource rents. Income from exhaustible natural resources are a pre-condition for many, but not all, SWFs, because their exploitation offers substantial and multi-year funding.[1] Based only on this criteria, one could expect to observe many more natural resource-rich countries with a SWF. However, many did not establish one.

We use the sudden emergence of new SWFs to test for the role of economic and political factors in their establishments using logistic regressions. We argue that the sudden emergence of SWFs in recent times was triggered by a commodities price boom that was outside of the control of individual countries. As the control group, we use all the countries that have not set up a SWF. The empirical identification relies on strict time-separability where past determinants relate to future establishments.

We find that resource rents are a strong predictor for the establishment of a SWF. However, these rents become less important once we control for a government's scale of accountability and executive constraint summarised in a single measure of autocracy. Past expenditures on public goods, such as on education, predict a lower probability of establishing a SWF in the future. We interpret this as an indication that on average countries have made a trade-off between domestic and foreign investments. We find that resource rents are a special case as the more general current account turns out to be a statistically insignificant regressor. Similarly, the variables that are robustly related to the probability of establishing a SWF are not similarly related to the countries foreign asset position. The decision to establish a SWF can, therefore, be interpreted as a policy instrument, but does not necessarily correspond directly to actual savings.

Establishing a special purpose fund designed to manage foreign investments, with transparent rules and objectives, is generally considered good policy once a country has evaluated its options between domestic investment and foreign savings (Mohn, 2016; Torvik, 2016). However, in our data a SWF is more likely to be established by an autocratic government than by a democratic one. Does this indicate that benevolent single rulers have been better in implementing sensible policies than democracies? This may not necessarily be the case once we look at the qualitative characteristics of SWFs. Using measures on the transparency of funds and their investment accountability we find a wide variation. Additionally, a number of the SWFs that were established during our sample period have a particularly small asset base relative to the potential windfall to the country. This can indicate that these funds may be set up primarily for political reasons rather than for genuine implementation of an optimal saving policy for future generations.

In fact, the surge of SWF establishments in autocratic countries with little experience of market-based investments gave rise to discussion on the potentially international political reasons behind these investments (Johnson, 2007; Kirshner, 2009; Monk, 2009). This in turn motivated some stakeholders to call for a regime of 'best practices' that could ensure that government-controlled funds invest for economic and financial reasons in transparent ways. Truman (2008) provided a first set of institutional characteristics, while the SWF Institute produces quarterly a similar rating (Linaburg and Maduell, 2014). The effect of such funds on the financial markets is in turn analysed by others (Beck and Fidora, 2008; Sun and Hesse, 2009; Kotter and Lel, 2011; In et al., 2013; Gomes, 2008; Bernstein et al., 2013; Ang, 2012). Neither those looking at the political characteristics of SWFs nor those looking at the financial characteristics of SWFs often take the domestic financial position (from the perspective of the SWF) into account. Those that do, find that domestic politics plays a great role in the final decision of setting up a SWF (Orihuela, 2013; Yi-Chong and Bahgat, 2010).[2]

To our knowledge, no academic contribution on SWFs specifically addresses the question of the emergence of SWFs and of the determinants leading countries to decide to set up such funds. The only notable exception is the paper of Aizenman and Glick (2009) which studies the determinants of the existence in 2007 or 2008 of SWFs. They find that current account surpluses, fuel exports and foreign exchange reserves are significant in explaining the existence of a SWF. They also explore the role of government indicators (proxied by the Worldwide Governance Indicators of Kaufmann et al., 2009). Our article differs to theirs by using an alternative econometric setup, and a dataset with which we are able to draw stronger causal relationships between economic-political country characteristics and the establishments of SWFs. We also relate directly to theoretical literature on resource wealth management, and test various predictions suggested in this literature discussed in the next section.

2. Data, hypotheses and methodology

The aim of this research is to understand why some countries have a SWF and others have not. Since some countries established a SWF and others did not, we have a classic binary setup that can be approached by a logit regression. We exploit the 1998–2008 window, when 16 countries established a SWF, to explore the role of a range of potential determinants before this period, taking data from 1997 or the average over several years ending in 1997.[3]

Information on the years of establishment of the SWFs and on the fund management characteristics were collected from Truman (2008).[4] Since we look at the country level, where necessary, we summarise the data over the different national SWFs. For instance, for the establishment data we take the earliest year available, for total assets we take the sum over all the funds. As reported in

[1] In the remainder of the text we will use the terms of natural resources, resources and commodities interchangeably.

[2] See also the fund profiles given by http://ccsi.columbia.edu/work/projects/natural-resource-funds/, created in cooperation with the National Resource Governance Institute.

[3] We estimated the models using several window lengths of the past, without much qualitative differences. These results are available on request.

[4] And completed by information collected on the website of the Sovereign Wealth Fund Institute, as of December 2016.