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Special Purpose Entities and Pass-Through Equity: A Micro-Analysis with BEA Data

Introduction

Special purpose entities (SPEs), legal entities with little or no employment or physical presence, play an important role in the global financial system. Financial transactions and direct investment positions recorded in macroeconomic statistics often reflect the flow of funds between business enterprises resident in one country and affiliated SPEs resident elsewhere. These statistics tend to record large direct investment equity positions in countries that host relatively more SPEs, irrespective of whether the equity passes through those countries to be used for production in other countries. Using firm-level survey data collected by the Bureau of Economic Analysis (BEA), this paper provides a summary of BEA's efforts to (i) identify SPEs in U.S. international economic statistics, (ii) measure the value of pass-through equity in affiliates, and (iii) understand the relationship between SPEs and pass-through equity. Preliminary results show that SPEs play a much larger role in U.S. direct investment abroad than in foreign direct investment in the United States and that SPEs account for a large amount of pass-through activity.

A paper on: Special Purpose Entities and Pass-Through Equity: A Micro-Analysis with BEA Data

Main issues to be discussed

The AEG is invited:

- to provide comments on the paper.

Special Purpose Entities and Pass-Through Equity: A Micro-Analysis with BEA Data

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Abstract:
Special purpose entities (SPEs), legal entities with little or no employment or physical presence, play an important role in the global financial system. Financial transactions and direct investment positions recorded in macroeconomic statistics often reflect the flow of funds between business enterprises resident in one country and affiliated SPEs resident elsewhere. These statistics tend to record large direct investment equity positions in countries that host relatively more SPEs, irrespective of whether the equity passes through those countries to be used for production in other countries. Using firm-level survey data collected by the Bureau of Economic Analysis (BEA), this paper provides a summary of BEA's efforts to (i) identify SPEs in U.S. international economic statistics, (ii) measure the value of pass-through equity in affiliates, and (iii) understand the relationship between SPEs and pass-through equity. Preliminary results show that SPEs play a much larger role in U.S. direct investment abroad than in foreign direct investment in the United States and that SPEs account for a large amount of pass-through activity.

Keywords:
Multinational enterprises, globalization, direct investment

1. Introduction:

Special purpose entities (SPEs) play an important role in the global financial system. Increasingly complex multinational enterprise (MNE) structures use SPEs, legal entities with no or little employment or physical presence, to gain the benefits of varied legal and tax systems around the world. The impact of SPEs on economic statistics is difficult to assess and poses a challenge to national governments, international organizations, and other data users seeking to understand the global economy. Financial transactions and foreign direct investment (FDI) positions recorded in macroeconomic statistics often include the flow of funds between business enterprises resident in one country, affiliated SPEs resident elsewhere, and indirectly controlled affiliates in a third location. Because the purpose of many SPEs is to hold funds or securities that support production in other countries, these statistics tend to record large FDI equity positions in countries that host relatively more SPEs, though in most cases this equity simply passes through those countries to be used for production elsewhere.

To the extent that such "pass-through" equity is recorded in published FDI flow and position statistics it may create challenges for data users in at least two ways. First, total flows, including those to SPEs, may overstate the actual amount of FDI flows that stay in the host economy. For countries hosting many SPEs, these overstatements may be large, resulting in published FDI statistics that overstate the impact that FDI has on the host economy since much of the published flows are capital-in-transit. Second, for large economies with significant outward FDI flows to SPEs, such as the United States, recording FDI flows by immediate destination country obscures the ultimate destination and purpose of those flows.

In 2016, the International Monetary Fund's (IMF) Committee on Balance of Payments Statistics set up a Task Force on SPEs (TFSPE). At the conclusion of its work in 2018, the TFSPE proposed a definition of SPEs to be used for collection and analysis of macroeconomic statistics.[1] Under the definition, an institutional unit that meets all four of the following criteria is considered an SPE: (1) a maximum of five employees and little or no physical presence; (2) direct or indirect control by nonresidents; (3) established to obtain specific advantages, such as access to capital markets, financial services, risk mitigation, or tax or regulatory minimization; and (4) transactions almost entirely with nonresidents. The TFSPE recognized that one important activity of SPEs is holding assets for use elsewhere as pass-through equity.

This paper marks the first attempt to use data from the U.S. Bureau of Economic Analysis (BEA) to understand the prevalence of SPEs and their use of pass-through equity in U.S. FDI statistics. Pass-through equity is measured using company-level microdata according to a method proposed in a recent working paper by OECD economists.[2] Identifying SPEs and measuring pass-through equity enhances understanding of global macroeconomic statistics in three ways: (1) it illuminates the extent to which SPEs are used as pass-through vehicles by U.S. and foreign MNEs, (2) it provides evidence of whether SPEs are used for purposes other than passing equity to other destinations, such as for holding intellectual property, and (3) it provides information on the engagement of non-SPE firms in pass-through activity. Although the TFSPE focused on resident SPEs, this paper focuses primarily on nonresident SPEs as those SPEs likely play a much larger role in U.S. FDI relationships, but it also discusses resident SPEs.

2. Methodology:

BEA collects data on U.S. MNEs, their foreign affiliates, and U.S. affiliates of foreign MNEs using several surveys. Two of these surveys, the Annual Survey of U.S. Direct Investment Abroad (USDIA) and the Annual Survey of Foreign Direct Investment in the United States (FDIUS), collect an array of data items reflecting the activities of MNEs (AMNE). These include location, employment, sales, expenditures for fixed capital, and full income statements and balance sheets for the respondent firms.

While BEA surveys do not collect direct information about the purpose of an affiliate, USDIA and FDIUS data can be used to identify likely SPEs, both for SPEs in the United States (using FDIUS data) and foreign SPE affiliates of U.S. MNEs (using USDIA data). Based on the TFSPE guidelines, BEA identified an affiliate as an SPE using the following criteria:[3]

(1) Majority-owned by their parent(s).
(2) Zero to five employees.
(3) Less than $1 million of gross property, plant, and equipment (PPE).
(4) Less than 10 percent of total sales are to customers in the host country (for companies with sales).

This paper also uses data collected on the surveys to estimate the amount of pass-through equity moving through each affiliate. Because the USDIA data include both affiliates held directly by U.S. parents and those held indirectly through other foreign affiliates, any equity in one affiliate that passes through to another affiliate is, in effect, reported twice (or more) as it moves down the ownership chain. Removing this pass-through from intermediate affiliates creates a different picture of how equity relates to operations and provides a framework for recording FDI positions according to their ultimate destination countries.

Each affiliate in a multinational ownership chain can have "inward" and "outward" direct investment equity positions that correspond to its roles as both an affiliate of a foreign parent and a parent of foreign

[1] IMF Committee on Balance of Payments Statistics. "Final Report of the Task Force on Special Purpose Entities." 31st Meeting: Washington, D.C., October 24-26, 2018. https://www.imf.org/external/pubs/ft/bop/2018/pdf/18-03.pdf.

[2] Borga, Maria, and Ceclia Caliandro. "Eliminating the Pass-Through: Towards FDI Statistics that Better Capture the Financial and Economic Linkages Between Countries." National Bureau of Economic Research Working Paper 25029: Cambridge, MA, September 2018. https://www.nber.org/papers/w25029.pdf.

[3] BEA operationalized TFSPE's "little or no physical presence" and "transact almost entirely with nonresidents" criteria with thresholds of less than $1 million of property, plant, and equipment and 10 percent of sales to local parties. These thresholds were tested for sensitivity and changes to them did not affect the results.

affiliates. An affiliate's inward equity position is its total equity financing from its parent, which is included in owner's equity in BEA AMNE publications. Correspondingly, an affiliate's outward equity position is the affiliate's equity in its foreign affiliates down the ownership chain, called equity in other foreign affiliates (hereafter, "equity in subsidiaries") in BEA published data.

Following the process outlined by the OECD economists, the value of pass-through equity in an affiliate is defined as the smaller of its outward and inward equity positions—i.e., the value of equity invested in the affiliate by its parent that the affiliate then invests in its own foreign affiliates down the ownership chain.[4] In other words, inward equity positions that are large enough to account for outward equity positions are assumed to be pass-through equity. Subtracting this pass-through value from both the inward and outward positions provides a new estimate of owner's equity and equity in subsidiaries for each affiliate that seeks to remove double counting of equity that passes through the affiliate and identify where the equity is ultimately being invested.[5]

3. Result:

III-A. Foreign (nonresident) SPE affiliates of U.S. MNEs

This section identifies and provides descriptive statistics about nonresident SPEs using the methodology described in the previous section. Nonresident SPEs, from the perspective of BEA, are foreign affiliates of U.S. MNEs.

In 2016, there were 78,413 majority-owned foreign affiliates (MOFAs) of U.S. MNEs. Of these MOFAs, 16,021 (20.4 percent) met the SPE criteria and accounted for 39.7 percent of total affiliate (SPE and non-SPE) assets.[6] SPEs were identified in 182 of the 199 industries in which MOFAs operated in 2016. Table 1 shows the five industries with the largest share of assets and the number of affiliates in each industry. Holding companies, which are companies that only own the financial securities of other companies, accounted for 85 percent of SPE assets and nearly half of the number of SPE affiliates. By share of SPE assets, holding companies were followed by financial sector industries including financial investment activities, non-depository credit intermediation, banking, and securities and commodities.

Table 1. Nonresident SPEs and Assets by Selected Industry, 2016

Industry of Affiliate	Number	Share of SPEs (%)	SPE Assets ($B)	Share of SPE Assets (%)
Total	*16,021*	*100.0*	*$10,032.4*	*100.0*
Holding companies	7,906	49.3	$8,533.0	85.1
Financial investment activities	910	5.7	$333.3	3.3
Non-depository credit intermediation	157	1.0	$285.7	2.8
Banking	49	0.3	$267.8	2.7
Securities and commodities	159	1.0	$117.6	1.2
Other industries	*6,840*	*42.7*	*$495.0*	*4.9*

The five countries hosting the largest share of SPE assets accounted for nearly 70 percent of total SPE assets, as shown in Table 2. The Netherlands, which hosted the largest share, and many of the other top host countries are commonly viewed as "countries of convenience"—that is, countries hosting large amounts of pass-through capital, intellectual property, or other SPE-related activities because of

[4] Borga and Caliandro.

[5] While these estimates better reflect the ultimate destination of the funds, there are at least three possible sources of mis-measurement. First, not all outward equity positions are necessarily funded by inward equity positions large enough to cover them. Second, there can be errors or omissions in the information about the chains of ownership among foreign affiliates. Third, there can be ambiguous relationships between inward and outward equity positions when directly-held affiliates have equity positions in multiple indirectly-held affiliates.

[6] Assets are used as a proxy for FDI position because position is only available for directly held affiliates, while assets are available for both directly and indirectly held affiliates. Assets are collected on company balance sheets and are not adjusted for ownership percentage.

favorable tax rules and other regulations. These five countries reflect the concentration of SPE activity in a small number of locations.

Table 2. Nonresident SPEs and Assets by Selected Country, 2016				
Country	**SPEs**	**Share of Global SPEs (%)**	**Assets ($B)**	**Share of Global SPE Assets (%)**
Total	*16,021*	*100.0*	*$10,032.4*	*100.0*
Netherlands	1,578	9.8	$2,151.0	21.4
Luxembourg	1,141	7.1	$1,881.0	18.7
United Kingdom	1,880	11.7	$1,157.0	11.5
Bermuda	594	3.7	$969.4	9.7
UK Islands, Caribbean[7]	1,529	9.5	$762.8	7.6
Other countries	*9,299*	*58.0*	*$3,111.3*	*31.0*

III-B. Pass-through equity in foreign (nonresident) affiliates of U.S. MNEs

Following the definition outlined in Section II, pass-through equity in MOFAs of U.S. MNEs totaled $6.5 trillion in 2016. This amount accounted for just over 50 percent of all owner's equity in MOFAs and 83 percent of their equity in subsidiaries. Removing $6.5 trillion from BEA's statistics on U.S. direct investment abroad would decrease overall owner's equity in MOFAs from $12.9 trillion to $6.4 trillion. Equity in subsidiaries would decline from $7.9 trillion to $1.4 trillion. Reflecting the close connection between pass-through equity and SPEs, 81 percent of all pass-through equity moved through SPEs.

Table 3 shows the five countries that host the largest amount of MOFA pass-through equity. These five countries accounted for two-thirds of all pass-through equity. In "countries of convenience" such as the Netherlands, Luxembourg, and Bermuda, pass-through equity made up 70 percent or more of total owner's equity. MOFAs in countries where U.S. MNEs tend to be engaged in more economic production were less likely to have pass-through equity than MOFAs in countries of convenience.

Table 3. Nonresident Pass-Through Equity by Selected Country, 2016				
Country	**Pass Through Equity ($B)**	**Share of Global Pass-Through Equity (%)**	**Share of Country's Owner's Equity (%)**	**Share Accounted for by SPEs (%)**
Total	*$6,511.4*	*100.0*	*50.4*	*81.5*
Netherlands	$1,483.7	22.8	72.9	85.2
Luxembourg	$1,028.8	15.8	71.6	93.4
United Kingdom	$792.4	12.2	46.9	78.7
Bermuda	$649.1	10.0	69.6	92.0
Canada	$363.7	5.6	47.8	73.7
Other countries	*$2,193.7*	*33.7*	*n.a.*	*n.a.*

While SPEs with pass-through equity made up approximately one-third of all SPEs, they accounted for a large majority of the total assets of SPEs. The 5,471 SPEs with pass-through equity had $8.8 trillion of assets, compared to a total of $1.2 trillion for the 10,550 SPEs without pass-through.

III-C. U.S. (resident) SPE affiliates of Foreign MNEs

Sections III-A and III-B focus on nonresident SPEs, as those SPEs likely play a much larger role in U.S. direct investment relationships partly due to the favorable tax and regulatory environments in some foreign countries of convenience. This section and the following section provide parallel statistics for resident SPEs.

[7] The UK Islands, Caribbean comprises Anguilla, the British Virgin Islands, the Cayman Islands, and Montserrat.

In 2016, there were 22,054 majority-owned U.S. affiliates (MOUSAs) of foreign MNEs. Of these MOUSAs, 4,653 (21.1 percent) met all four SPE criteria. SPEs were identified in 180 of the 200 industries in which MOUSAs operated in 2016. Table 4 shows the five industries with the largest share of SPE assets and the number of SPEs in each industry. Holding companies, despite holding 95 percent of resident SPE assets, accounted for only 13 percent of the number of SPEs.[8] Resident SPEs were more likely to be found in the real estate industry than any other industry. While this industry includes real estate trusts, it also includes smaller-value properties that may meet the TFSPE's definition as applied here. Future research is needed to understand which of these affiliates are truly SPEs.

Table 4. Resident SPEs and Assets by Selected Industry, 2016

Industry of Affiliate	Number	Share of SPEs (%)	Assets ($B)	Share of SPE Assets (%)
Total	*4,653*	*100.0*	*$159.4*	*100.0*
Holding companies	594	12.8	$151.7	95.2
Nondepository credit intermediation	48	1.0	$3.1	2.0
Real estate	1,571	33.8	$1.2	0.8
Financial investment activities	260	5.6	$1.2	0.8
Funds and trusts	135	2.9	$1.1	0.7
Other industries	*2,045*	*44.0*	*$1.1*	*0.7*

The five countries of ultimate beneficial owner (UBO)[9] with the largest shares of resident SPE assets accounted for more than three-quarters of total SPE assets. Most of these countries are longstanding trade and investment partners of the United States. The largest share of SPE assets in the United States was ultimately owned by United Kingdom-based MNEs, but the second largest share was ultimately owned by U.S. persons (commonly referred to as "roundtrip FDI").

Table 5. Resident SPEs and Assets by Selected Country of UBO, 2016

Country of UBO	SPEs	Share of U.S. SPEs (%)	Assets ($B)	Share of U.S. SPE assets (%)
Total	*4,653*	*100.0*	*$159.4*	*100.0*
United Kingdom	905	19.4	$48.5	30.4
United States	520	11.2	$43.7	27.4
Netherlands	499	10.7	$12.5	7.8
Canada	309	6.6	$9.2	5.8
Mexico	263	5.7	$8.2	5.1
Other countries	*2,157*	*46.4*	*$37.3*	*23.4*

III-D. Pass-through in U.S. (resident) affiliates of foreign MNEs

In 2016, pass-through equity in MOUSAs of foreign MNEs totaled $613 billion. This represented less than 10 percent of the value of pass-through found in MOFAs of U.S. MNEs, indicating that pass-through activity is more common for U.S. outward direct investment than for U.S. inward direct investment. Pass-through equity made up 24 percent of owner's equity in MOUSAs, compared with 50 percent of owner's equity in MOFAs. Pass-through equity accounted for 80 percent of MOUSA equity in subsidiaries, similar to the 83 percent observed for MOFAs. Subtracting $613 billion from BEA's inward statistics on foreign direct investment in the United States would decrease owner's equity in

[8] U.S. affiliates report on a consolidated domestic U.S. basis. The industry of a U.S. affiliate is determined by the industry from which the consolidated U.S. company derives the majority of its sales. Consolidated U.S. affiliates may include holding companies within the consolidation. This differs from the U.S. direct investment abroad data in which, according to survey instructions, foreign affiliates cannot be consolidated across industries or countries.

[9] The UBO is that person, proceeding up a U.S. affiliate's ownership chain, beginning with and including the foreign parent, that is not owned more than 50 percent by another person. Unlike the foreign parent, the UBO of an affiliate may be located in the United States.

MOUSAs from $2.5 trillion to $1.9 trillion, while equity in subsidiaries would decline from $762 billion to $149 billion.

Another important difference between pass-through in MOUSAs and MOFAs is that MOUSA pass-through equity is much more distributed across SPEs and non-SPEs. While 82 percent of MOFA pass-through moves through SPEs, that figure is only 17 percent for MOUSAs. [10]

Table 6 shows the five largest sources of MOUSA pass-through equity by country of UBO. These five countries accounted for 57 percent of all pass-through equity in MOUSAs. Pass-through equity made up 40 percent of owner's equity in MOUSAs of UK-headquartered MNEs, though those U.S. affiliates were generally not SPEs. The largest share of pass-through equity in MOUSAs originating in the United Kingdom moves through financial investment affiliates.

Table 6. Resident Pass-Through Equity by Selected Country of UBO, 2016

Country of UBO	Pass Through Equity ($B)	Share of U.S. Pass-Through Equity (%)	Share of Owner's Equity of Country's Affiliates (%)	Share Accounted for by SPEs (%)
Total	*$612.5*	*100.0*	*24.1*	*17.4*
United Kingdom	$169.6	27.7	40.2	17.9
Canada	$62.0	10.1	22.3	5.1
Japan	$41.8	6.8	12.1	8.1
France	$40.5	6.5	18.8	2.1
Ireland	$38.3	6.2	24.1	7.5
Other countries	*$260.9*	*42.6*	*n.a.*	*n.a.*

While most holding company MOUSAs (489 of 652, or 75 percent) host pass-through equity, SPEs in the United States, in general, are unlikely to do so. Of 4,653 SPEs identified, only 437 have pass-through equity. This absence of pass-through equity may indicate that SPEs in the United States are used for purposes other than pass-through equity and that because the United States is not a "country of convenience," foreign MNEs are likely using other countries for pass-through activities.

4. Discussion and Conclusion:

This paper represents a first attempt to identify and analyze SPEs in U.S. direct investment statistics using the TFSPE's definition. This paper shows that SPEs play a much larger role in U.S. direct investment abroad than in foreign direct investment in the United States. SPEs—particularly nonresident SPEs—host a large amount of pass-through capital that moves from the parent company through an intermediary country before reaching the country where economic production occurs. The large overlap between SPEs and pass-through equity in the U.S. direct investment data is an indication that the SPE criteria developed by TFSPE will be useful in isolating SPEs in international investment statistics and that by identifying SPEs—particularly in "countries of convenience"—most pass-through activity will be identified as well. Additional work to fit the TFSPE's definition of SPEs to BEA microdata will allow BEA to further refine this identification. In particular, understanding which real estate affiliates in the United States are truly SPEs will provide clarity about the role of U.S.-resident SPEs in inward direct investment.

In addition to gaining a clearer understanding of the role of SPEs in such pass-through relationships, this paper outlines progress toward a framework for "pushing down" the U.S. direct investment position past SPEs to operating units and providing a clearer picture of how U.S. direct investment abroad relates to economic production in foreign countries. Future research will be able to study the distribution of U.S. direct investment after the elimination of pass-through.

[10] As with holding companies discussed in footnote 6, the lower share of SPEs in MOUSA pass-through may reflect the FDIUS survey's consolidation rules.