



Financial Transactions Taxes: A Wall Street Levy that Won't Affect Pension Funds

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Introduction

Proposals for financial transactions taxes (FTT) have gained considerable support in recent years. There have been several bills introduced in Congress calling for an FTT. All the major candidates for the 2020 Democratic presidential nomination came out in support of an FTT. The idea of raising substantial revenue (the Congressional Budget Office estimated a 0.1 percent tax could raise almost \$800 billion over a decade), while reducing wasteful trading in the financial sector, has considerable economic and political appeal (Congressional Budget Office).

As an FTT has become more politically plausible, some managers of pension funds, both public and private, have expressed concern about its possible impact on their finances. This report will show an FTT would have a minimal impact on the solvency of pension funds. At the most basic level, the size of the proposed taxes is small relative to annual returns or even compared to the other administrative costs that pension funds incur.

Furthermore, we would expect the pension funds would trade less in response to the increase in the cost of trading stemming from tax. Most estimates show that the decline in trading volume due to the tax would roughly offset the increase in trading costs (Matheson). This means, for example, that if the tax raised trading costs by 30 percent, the expected trading volume would decline by roughly 30 percent. In the end, the total amount that pension funds spent on trading, even including the tax, would be little changed.

This paper examines two issues related to pension funds and FTTs. First, data from several of the largest public pension funds shows that a substantial share of pension fund assets is invested in countries that already impose FTTs, including the United Kingdom, France, Italy, China, and India. Pension funds would not voluntarily expose themselves to these taxes if they were a big factor in reducing investment returns. The fact that the pension funds for which we could find data willingly invested a substantial portion of their assets in countries with FTTs indicates that they do not see it as a major negative for investment returns.

The other issue the paper examines is the current returns received by pension funds. As noted above, we would expect that pension funds would reduce their trading volume in response to the imposition of an FTT, roughly offsetting the cost of the tax. In principle, lower trading



volumes should have little impact on returns since trading is largely a zero-sum game. Every trade has a winner and a loser, which should average out for most investors, who will end up half the time in each group. Increased trading volume can only improve returns on average if it leads to better outcomes for the economy as a whole, which is not a plausible story in the US economy at present.

Of course, there are some investors who are net winners from their trades. If these investors traded less then it could mean that they would receive lower returns. The second half of this paper considers this possibility by examining the returns of these funds over the last five years. If they substantially exceeded major market indexes, there would be an argument that pension funds have successful trading strategies that could be harmed by a reduction in trading volume. As it turns out, their returns do not exceed returns from the S&P 500 over this period.

These two points should help to reduce concerns that pension funds may have over the risks they would face from an FTT. First, they already seem quite comfortable in investing markets where they face FTTs, so by their actions, they do not seem to view FTTs as being too harmful to investment returns. Second, they do not seem to have any extraordinarily successful trading strategy that would be harmed if they reduced trading volume in response to an FTT.

Pension Fund Investment in Countries with FTTs

To diversify their risk, large pension funds invest in a range of countries throughout the world. Several of the countries in which pension funds have invested substantial sums have FTTs. **Table 1** shows a list of major countries with financial transactions taxes.

Table 1**Major Countries with Financial Transactions Taxes**

(percent)

Belgium	0.35
China	0.2
France	0.3 (and 0.01 on high frequency trading)
Hong Kong	0.2
India	0.1
Ireland	0.1
Italy	0.1
Malaysia	0.3
Pakistan	0.01
Poland	1
South Africa	0.25
South Korea	0.15 – 0.3
Switzerland	0.15
Taiwan	0.1
Thailand	0.1
United Kingdom	0.5

Source and Notes: It is worth noting that many of these countries apply different rates to some trades so that the actual tax imposed is somewhat more complicated than indicated in Table 1. Dowd, Chris. "Financial Transactions Taxes Around the World, 2020." Washington DC: Center for Economic and Policy Research. <https://cepr.net/report/financial-transactions-taxes-around-the-world/>.

The list in Table 1 excludes many smaller countries, which also have financial transactions taxes. It also excludes the United States, which has a tax of 0.0013 percent used to finance the Securities and Exchange Commission. It raised roughly \$2 billion in 2018 (Congressional Budget Office). There is also a small tax on options and futures trading used to fund the Commodities and Futures Trading Commission.

Table 2 shows the extent of investment in the markets of countries with a financial transactions tax by several major public pension funds. These funds were selected because of the availability of data. Unfortunately, data on investments by most public pension funds is not easily accessible. This should be seen as a serious problem, since this is public money. The funds obviously have the information on where their money is invested. Posting this information on a public website should be a fairly simple and low-cost task. The workers paying into these pensions, reporters, researchers, and the general public should be able to find out where their money is being invested and what returns the funds are receiving.



Table 2

Share of Assets Invested in Countries with FTTs

Public Pension Fund	Total Assets \$ (dollar)	Foreign Share	China	France	India	Italy	United Kingdom	Other	Total	
			(percent)							
Employees Retirement System of Texas (TX)	29,978,530,000	16.0	0.1	0.0	0.3	0.0	2.0	5.2	7.5	
New York State and Local Retirement System (NYSLRS)	221,635,144,000	17.2	0.7	0.0	0.5	0.0	2.0	3.6	6.7	
Maryland State Retirement & Pension System (MD)	60,592,200,000	2.3	0.2	0.0	0.0	0.0	0.2	0.1	0.4	
Pennsylvania School Employees (PSERS) (PA)	64,865,390,000	9.3	0.0	0.0	0.2	0.0	1.4	2.3	3.9	
Employees Retirement System of Georgia (GA)	18,766,609,000	15.4	0.0	0.0	0.4	0.0	0.6	2.2	3.2	
Teacher Retirement System of Texas (TX)	157,433,339,177	19.2	0.1	0.0	0.6	0.0	0.2	6.8	7.8	
State of Wisconsin Investment Board (WI)	116,693,325,000	17.3	0.0	0.0	0.1	0.0	2.5	4.5	7.0	
North Carolina Retirement (NC)	15,460,189,000	9.1	0.0	0.0	0.3	0.0	1.5	3.2	4.9	
Washington State Investment Board (WA)	128,283,577,847	14.3	0.6	0.0	0.2	0.0	1.8	4.1	6.6	
New York State Teachers' Retirement System (NYSTRS)	123,952,716,000	19.6	0.7	0.0	0.3	0.0	2.5	6.0	9.4	
Los Angeles City Employees (CA)	18,867,824,935	30.6	0.3	0.2	0.1	0.0	0.3	5.6	6.6	
Chicago Teachers' Pension Fund (IL)	11,849,959,061	30.3	2.0	2.7	0.5	0.0	4.9	3.6	13.7	
Mississippi Public Employees Retirement System (MS)	33,000,552,000	14.1	0.4	0.8	0.3	0.2	1.6	1.8	5.2	
Missouri Public Schools (MO)	43,235,255,321	16.3	1.5	1.1	0.1	0.0	1.3	0.1	4.1	
New Jersey Division of Investment (NJ)	75,082,620,000	10.6	0.3	0.0	0.3	0.1	1.0	2.6	4.3	
<i>Average</i>		16.1	0.6	0.8	0.3	0.1	1.6	3.4	6.1	

Source: Fund financial statements, see references.

Table 2 shows that the unweighted average share of assets held in countries with FTTs for the selected 15 pension funds was 6.1 percent.¹ This is just under 40 percent of the assets held in foreign countries. The United Kingdom was an especially popular destination for pension fund investment, with its 1.6 percent of total holdings accounting for almost 10 percent of their foreign investments. This is striking since the UK has the highest FTT of any major country.

Of course, this does not prove that FTTs have not reduced the flow of pension investment to the countries that have them. It is possible that pension funds would invest a larger share of their assets in these countries if they did not have FTTs. However, this pattern of investment does indicate that pension funds apparently do not consider FTTs to be so costly as to prevent them from investing a substantial portion of their assets in countries that have them.

Pension Fund Investment Returns

At the most basic level, it is difficult to see how an FTT at the proposed 0.1 percent level could have a major impact on pension fund returns. The arithmetic is straightforward. Suppose we have a 0.1 percent tax and a pension turns over 30 percent of its portfolio each year. This would mean that the direct cost of the tax is 0.03 percent of the pension fund's assets.²

But even this 0.03 percent cost figure overstates the true cost of the tax. It would be expected that pension funds would respond to the imposition of an FTT by reducing their trading volume. The basic story is that an FTT would make it more expensive to trade; therefore, pension funds would trade less.

Most research indicates that trading volume elasticity with respect to trading costs is close to one (Matheson). This means that the money saved as a result of reduced trading should be

¹ Many of the funds listed European assets collectively rather than giving individual country holdings. In these cases, it was assumed that 40 percent of the holdings were in countries that had FTTs.

² This assumes that the pension fund is buying new shares each time it sells existing shares and that it effectively pays half of the tax (0.05 percent) each time.

roughly equal to the amount that the pension fund has to pay out for the FTT. For example, if the FTT raises trading costs by 40 percent, we would expect trading volume to fall by roughly 40 percent. That would mean that the pension fund was paying 40 percent more on each trade (including the tax), but it was trading 40 percent less, leaving its total trading costs approximately the same. The reduction in trading volume translates into lost revenue for the industry, which explains why it is so strongly opposed to a FTT.

Although it might seem that there is a loss to pension funds if they reduce their trading volume substantially, as noted above, this is not generally the case. On average, trading is a zero-sum game, with every trade having a winner and a loser. Pension funds presumably land on each side half of the time.

Some exceptional traders have extraordinary insights that allow them to consistently beat the market. If an FTT caused these people to trade less, then it could mean lower returns. There is a simple way to test whether pension fund investments are typically directed by these exceptional traders: we can look at their returns.



Table 3**Average Returns for Major Public Sector Pension Funds**

Public Pension Fund	Total Assets (dollars)	Returns (5 years) (percent)
Employees Retirement System of Texas (TX)	29,978,530,000	5.9
New York State and Local Retirement System (NYSLRS)	221,635,144,000	5.2
Maryland State Retirement & Pension System (MD)	60,592,200,000	5.6
Pennsylvania School Employees (PSERS) (PA)	64,865,390,000	6.0
Employees Retirement System of Georgia (GA)	18,766,609,000	6.7
Teacher Retirement System of Texas (TX)	157,433,339,177	6.7
State of Wisconsin Investment Board (WI)	116,693,325,000	5.6
North Carolina Retirement (NC)	15,460,189,000	5.7
Washington State Investment Board (WA)	128,283,577,847	9.5
New York State Teachers' Retirement System (NYSTRS)	123,952,716,000	7.2
Los Angeles City Employees (CA)	18,867,824,935	7.6
Chicago Teachers' Pension Fund (IL)	11,849,959,061	6.3
Mississippi Public Employees Retirement System (MS)	33,000,552,000	7.1
Missouri Public Schools (MO)	43,235,255,321	6.1
New Jersey Division of Investment (NJ)	75,082,620,000	4.9
Minnesota State Board of Investment (MN)	101,100,000,000	2.6
Massachusetts Pension Reserves Investment Trust (MA)	79,192,041,000	7.0
Tennessee Consolidated Retirement System (TN)	55,854,039,892	6.6
Illinois Municipal Retirement Fund (IL)	45,514,070,817	7.6
Teachers' Retirement System of the State of Illinois (IL)	62,561,610,215	7.4
<i>Average</i>		6.4
<i>S&P 500</i>		9.3

Source: Fund financial statements and author's calculations.

As can be seen in **Table 3**, the five-year average (2014–2018) returns for the exceptional group was not especially impressive, at 6.4 percent. It is well below the 9.3 percent returns on the S&P 500 for this period. The average return would be lagging even if we compared it to a mixed portfolio with 70 percent stock and 30 percent bonds, which would have yielded an average return of 7.3 percent. (This assumes a 3.0 percent average return on bonds.) The one exception is the Washington State Investment Board, which managed above normal returns by committing an exceptional share of its assets to private equity. Whether or not this heavy reliance on private equity is a good strategy, it is not likely to be substantially affected by an increase in trading costs associated with an FTT.³

³ It is not clear exactly how the Washington State returns were calculated. Private equity funds often provide internal rates of return, which rely on their own estimate of asset values. The only unbiased measure of private equity returns is a calculation made after the closing of a fund. Appelbaum and Batt find that private equity returns in the last decade have not exceeded the returns in relevant market indices (Appelbaum).

In short, there is no reason to believe that if pension fund managers act like other investors, and reduce their trading in response to an FTT, that it will have any noticeable impact on returns to pension funds. The savings on trading costs, due to lower trading volume, should offset whatever they end up paying in taxes. The cost of the tax will be borne by the financial industry, which will be getting less revenue, not the pension funds.

Conclusion: Pension Funds Have Nothing to Fear from Financial Transactions Taxes

This paper makes two points. First, most pension funds have no qualms about investing a substantial portion of their assets in markets of countries that have FTTs. In fact, the country with the highest FTT, the United Kingdom, draws the largest share of pension funds' foreign investment.

The other point is that, if pension funds reduce trading volume in response to the increase in trading costs from an FTT, as research indicates would be the case, it should not have a noticeable impact on returns. Pension funds returns in recent years have substantially underperformed the S&P 500. This means that they do not have some extraordinary trading strategy that would be jeopardized by a reduction in trading volume. If pension funds responded to an FTT by cutting back on trading, their total costs and returns should be little changed. The financial industry will bear the cost of the tax.

In short, there is little reason for pension funds to fear an FTT. In fact, if the revenue is used for productive ends, pension funds should share in the gains to the economy as a whole.



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