

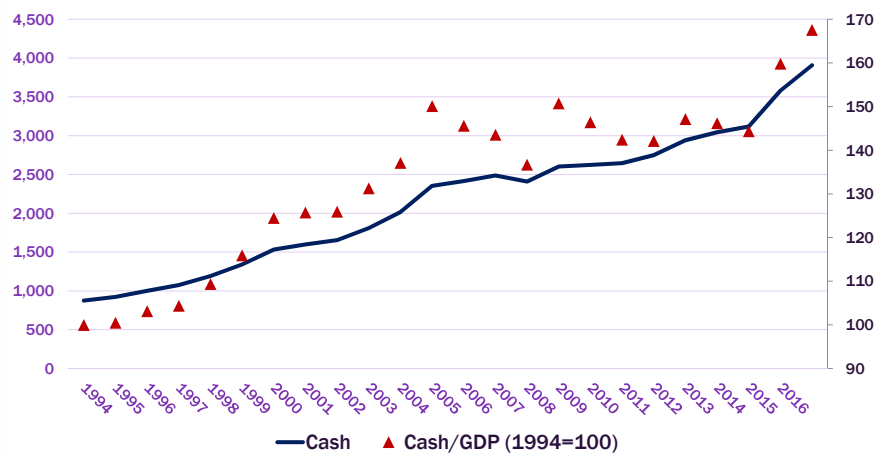
Where To Stash A Trillions Dollars: Tax Reform History and Future

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GROWTH OF TOTAL CASH HOLDINGS (\$B)



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WHY DO FIRMS HOLD CASH?



FOREIGN TAXATION EXAMPLE IMMEDIATE REPATRIATION

- Foreign Income of 100
- Foreign Taxes ($\tau=5\%$): $5 = 100 * 0.05$
- US Taxes ($\tau = 35\%$):

$$\begin{aligned} \text{USTax on Foreign Income} &= \tau_D \left[\frac{\text{Dividend}}{(1-\tau_F)} \right] - \tau_F \text{Foreign Income} \\ &= 0.35 \left[\frac{95}{(1-0.05)} \right] - 0.05(100) = 35 - 5 = 30 \end{aligned}$$

- Total Taxes are Equal



*Faulkender and Petersen (2012)

FOREIGN TAXATION EXAMPLE DELAYED REPATRIATION

- **Foreign Income of 100**
 - **Foreign taxes ($\tau = 5\%$): $5 = 100 * 0.05$**
 - **US taxes ($\tau = 35\%$) when repatriated (10 years):**

$$V_{\text{deferral}} = \frac{100(1-0.05)[1+0.10(1-0.05)]^{10} - (0.35-0.05) \frac{100(1-0.05)[1+0.10(1-0.05)]^{10}}{(1-0.05)}}{[1+0.10(1-0.35)]^{10}}$$

$$= \frac{100(1-0.35)[1+0.10(1-0.05)]^{10}}{[1+0.10(1-0.35)]^{10}} = 85.8 > 65.0$$

$$PV(\text{taxes}) = 14.2 < 35$$



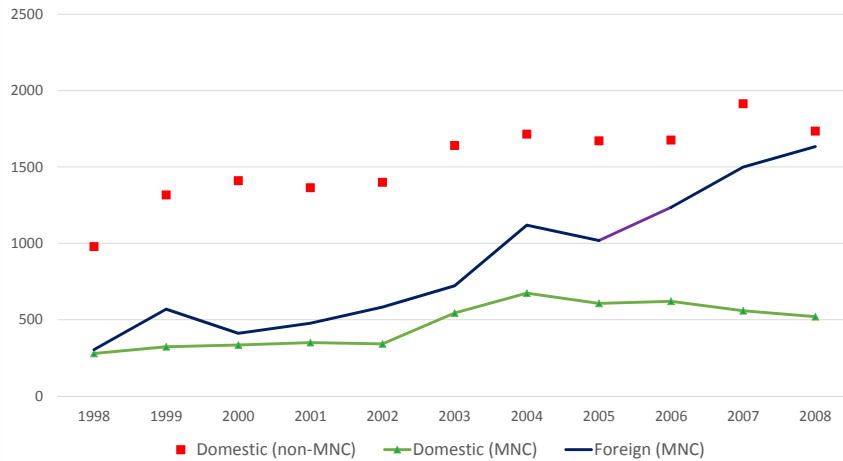
*Faulkender and Petersen (2012)

WE KNOW WHERE THE CASH IS (DISCLOSURE)

The statistical analysis of firm-level data on U.S. multinational companies was conducted at the Bureau of Economic Analysis, U.S. Department of Commerce, under arrangements that maintain legal confidentiality requirements. The views expressed in this paper/discussion are those of the authors and do not reflect official positions of the U.S. Department of Commerce.



RISE IN CASH STOCKPILES: WHAT DO YOU NOTICE?



LOCATION OF CASH: INDUSTRY

	Industry Names (SIC codes)	Foreign Cash	Total Cash	Foreign Income	Foreign Tax Rate
Top 5	Chemical & Allied Products (28)				
	Petroleum & Coal Products (29)	69.8%	47.7%	33.2%	26.9%
	Industrial Machinery & Equipment (35)				
	Transportation Equipment (37), and Business Services (73)				
	Above five industries plus				
Top 9	Not Classified (e.g. conglomerates 99)	85.9%	71.0%	29.3%	26.4%
	Food & Kindred Products (20)				
	Electrical Equip & Components (36)				
	Controlling Instruments (38)				
	All Other Industries	14.1%	29.0%	13.4%	29.6%

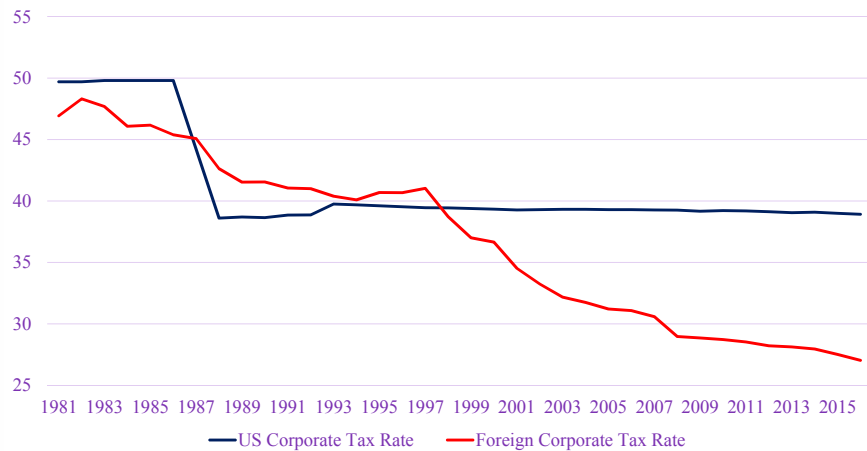


WHERE IS CASH? COUNTRIES

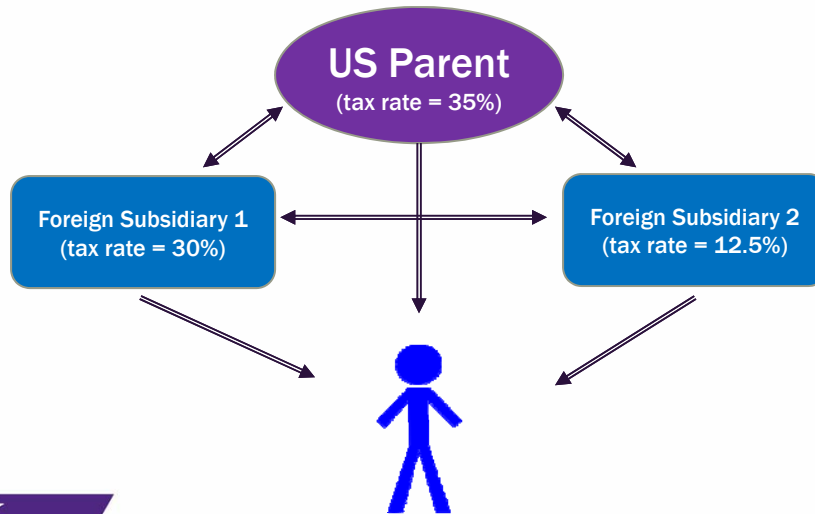
1998				2008			
Country	Foreign Cash %	Foreign Sales %	Corporate Tax Rate	Country	Foreign Cash %	Foreign Sales %	Corporate Tax Rate
United Kingdom	14.6%	14.8%	27.3%	Ireland	13.1%	4.0%	12.5%
Netherlands	10.4%	5.8%	35.0%	United Kingdom	11.1%	12.7%	26.1%
Ireland	9.0%	2.0%	32.0%	Bermuda	9.9%	1.1%	0.0%
Germany	6.9%	10.6%	56.6%	Netherlands	9.9%	4.7%	24.3%
Belgium	5.8%	2.5%	37.2%	Belgium	5.6%	2.4%	31.1%
France	5.4%	6.0%	41.7%	Luxembourg	5.5%	0.4%	0.0%
Switzerland	5.1%	2.9%	27.8%	Canada	5.0%	10.0%	30.9%
Canada	4.3%	11.1%	44.6%	Germany	4.6%	7.0%	30.9%
Bermuda	4.2%	0.6%	0.0%	Switzerland	4.1%	4.5%	7.8%
Italy	3.5%	3.1%	33.0%	France	2.9%	3.9%	34.4%
Singapore	2.9%	3.2%	26.0%	Australia	2.5%	2.9%	30.0%
Japan	2.6%	7.8%	51.6%	Japan	2.2%	5.4%	43.0%
Australia	2.1%	2.8%	36.0%	Singapore	1.9%	4.9%	18.0%
Brazil	2.0%	3.6%	25.0%	Italy	1.7%	2.6%	27.5%
Spain	1.9%	2.1%	35.0%	China	1.6%	3.5%	25.0%
Other Countries	19.3%	21.0%		Other Countries	18.3%	30.2%	
Top 6 Countries	52.0%	42.0%	38.3%	Top 6 Countries	55.0%	25%	15.7%



CORPORATE TAX RATES: US AND FOREIGN

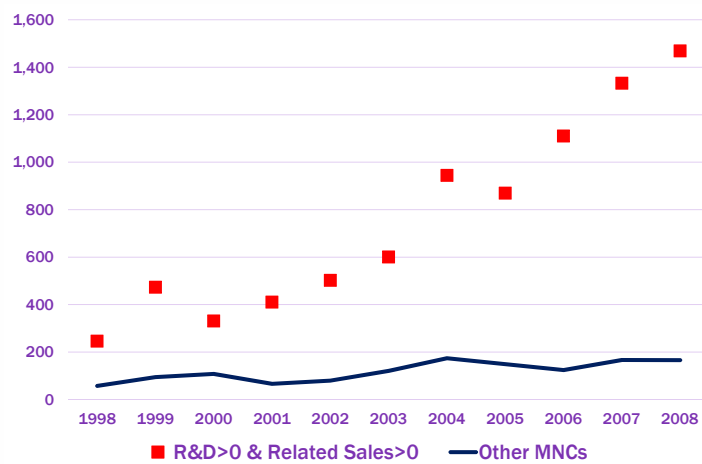


THE MODERN SUPPLY CHAIN



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FOREIGN CASH BY RELATED SALES & R&D (MULTINATIONAL FIRMS ONLY)



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DOES TRAPPED CASH EFFECT ECONOMIC GROWTH AND INVESTMENT?

- **Macro Economic Effects**



- **Micro Economic Effects**
- **Distortions in Resource Allocation**



TAX CUTS AND JOBS ACT OF 2017

- **Cut Corporate Tax Rate from 35% to 21%**
- **No Longer Tax Foreign Income (with exceptions)**
- **One Time Tax on Unrepatriated Income (2017)**
- **Still Tax Foreign Income**
 - **BEAT: Base erosion and anti-abuse tax**
 - **GILTI: Global intangible low-taxed income**



QUESTIONS AND THOUGHTS

