

Wells Fargo Foreign Exchange

2018 Risk Management Practices Survey





Shanghai

2018 Risk Management Practices Survey

Wells Fargo Foreign Exchange is pleased to present our fifth biennial survey on FX risk management practices. We sincerely offer our thanks to the 330 clients who took the time to provide information necessary to create this survey and hope this latest edition continues to bring insight on establishing proper policies and procedures for managing currency risk in an increasingly global economy.

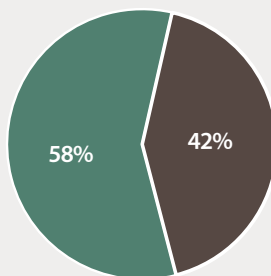
Since our last survey, we have experienced some truly unexpected political events (Brexit and the U.S. elections), as well as a shifting global interest rate environment. With this backdrop, we present the findings of our 2018 Foreign Exchange Risk Management Survey.

Survey participant composition

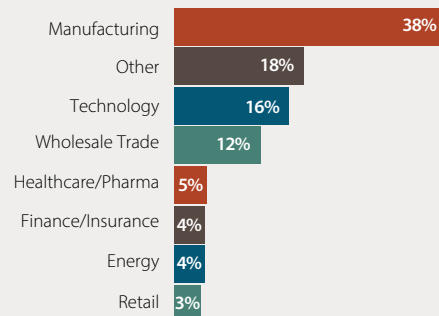
Annual revenue

Total respondents	330
Greater than \$5 billion	16%
\$1 billion to \$5 billion	28%
\$500 million to < \$1 billion	15%
\$100 million to < \$500 million	22%
< \$100 million	19%

Public vs. private



Industry



Executive summary

Once again, we have polled a wide spectrum of companies across geographies and industries, of varying size, and both public and private. The information contained in these pages details how these companies evaluate FX risk, the types of exposures they hedge, how they think about budgeting, accounting, and a host of other issues.

Concern regarding FX risks

Over the last several years as evidenced by our last three surveys, we have consistently seen more clients viewing FX as a greater concern than a lesser one. However, it is interesting to note that the level of concern seems to correspond to the value of the U.S. dollar. When the dollar weakened (as in the 2014 survey and the current 2018 survey), a small proportion of clients experienced greater concern. However, in 2016, when the dollar strengthened, concern was very elevated. This may indicate that more companies suffer when the dollar strengthens (as net exporters would) than when the dollar weakens.

Best practices

We saw upticks in the use of quantitative analysis, the setting of budget rates for planning purposes, the updating of FX policies, and the minimum thresholds for counterparty creditworthiness. We would consider all of these “best practices,” as these traits were much more evident in large public companies, which tend to require heavier focus on, and investment in, managing FX-related issues.

Hedge instruments

Companies predominately use forwards to hedge all types of FX risk. But depending on the specific exposure, we see some variation. For example, companies are twice as likely to use cross-currency swaps to hedge balance sheet exposure related to financing versus balance sheet exposure related to trade. Furthermore, 20% of clients use some sort of option structure for hedging, with relatively more using options to hedge forecasted exposures than for balance sheet items.

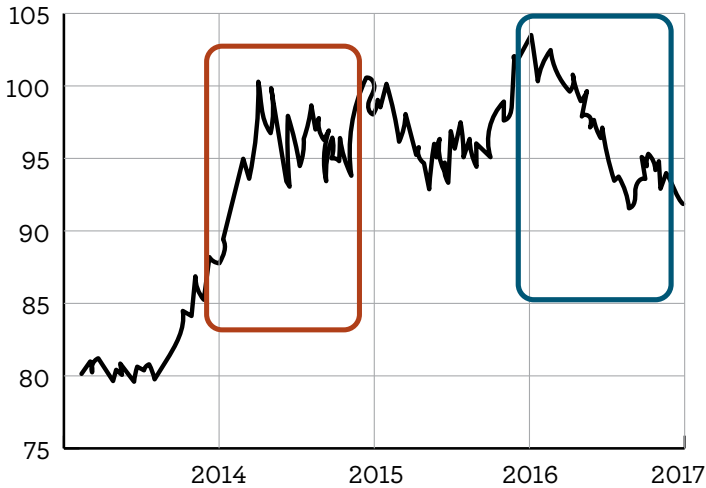


Perceptions and processes

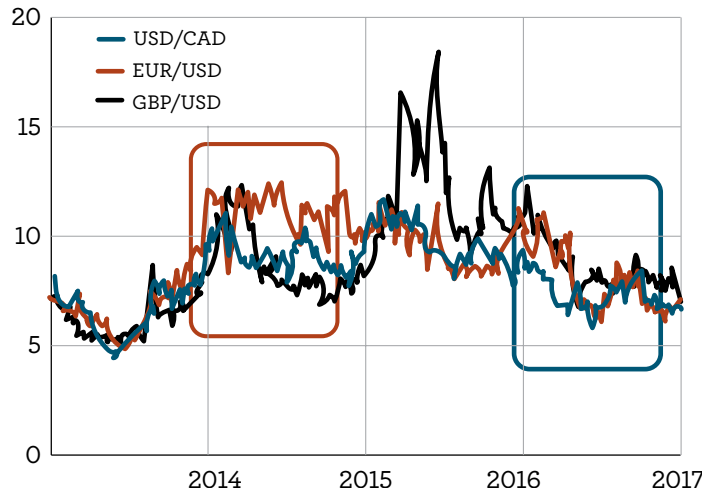


At the time of our previous (2015 - 2016) risk management survey, currency market conditions were highlighted by an upward trending USD, which presented headwinds to U.S. exporters, and relatively elevated currency volatilities. The environment at the time of the present survey, by contrast, was arguably less challenging, with the USD experiencing a period of consolidation after weakening during the first half of 2017 and currency volatilities remaining relatively subdued.

USD (DXY Index)



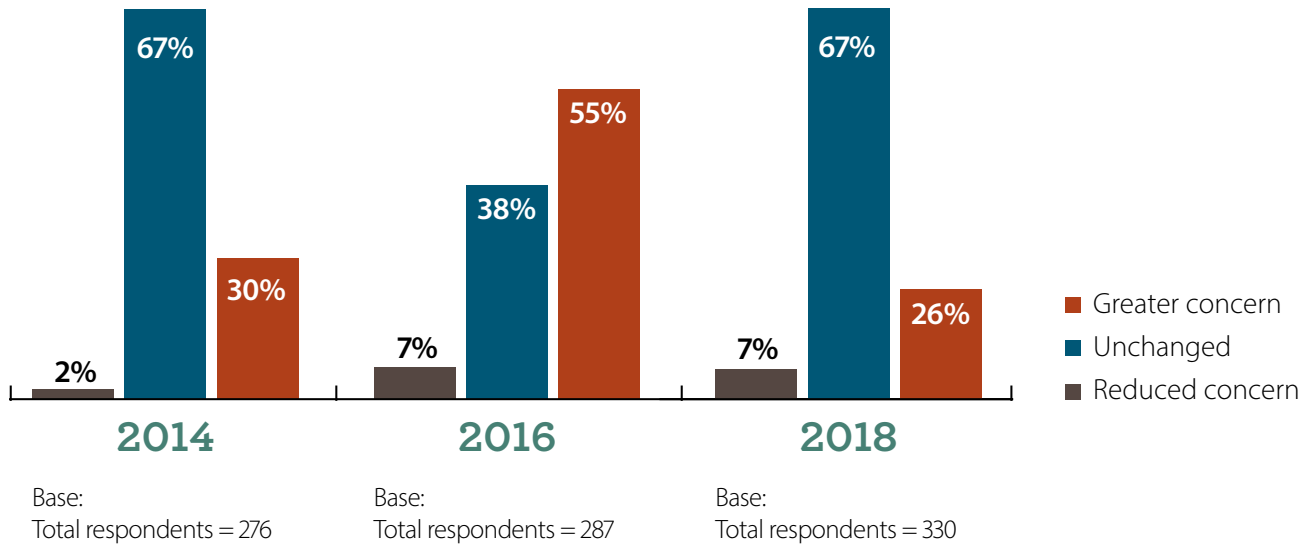
Implied currency volatilities (3m, ATMF)



Source (for USD and Implied currency volatilities charts): Wells Fargo estimates based on data from Bloomberg as of January 14, 2018

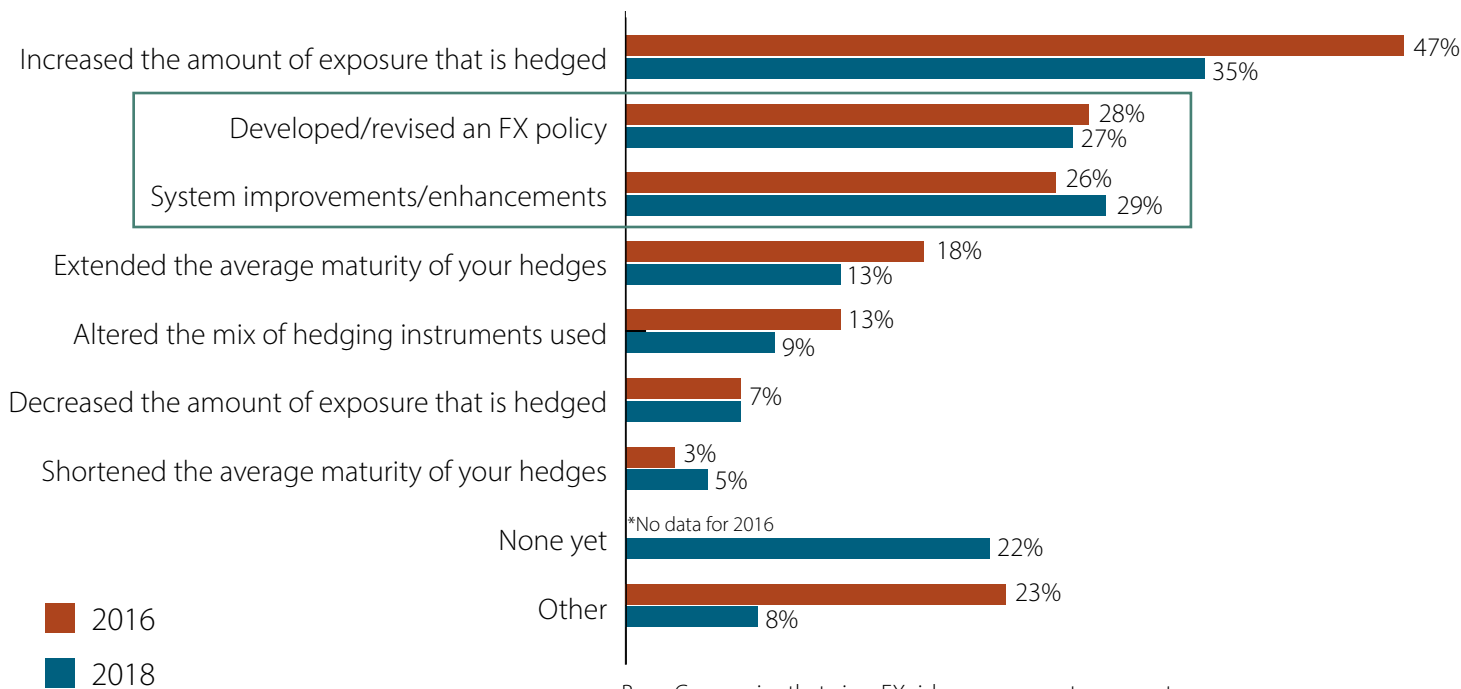
Given the generally more benign market environment, it comes as little surprise that a greater percentage of participants in the present survey indicate no change in their attitude toward FX risk management during the 12 months prior to the survey and a relatively smaller percentage indicate increased concerns.

Attitude toward FX risk management



Of the firms indicating increased concerns for FX risk management, adjusting hedge strategies (e.g., increasing the amounts of exposures hedged, lengthening the average maturities of hedges, and adjusting the mix of instruments) remains a focus, but these firms are also assigning priority to strengthening their risk management infrastructure (e.g., revising their FX policies and investing in systems).

Changes made to risk management



Base: Companies that view FX risk management as a greater concern
2016: 159 • 2018: 85



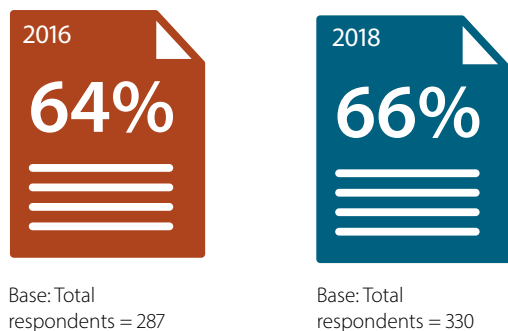
London

FX risk management infrastructure

The focus on enhancing FX risk management infrastructure is evidenced by upticks in number of firms having an FX policy, the frequency of policy reviews, and the increasing percentage of respondents quantifying exposure to FX risk.

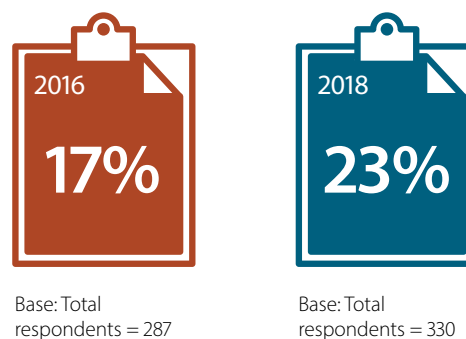
Have a formal written policy?

Yes, the company has a formal written policy for managing foreign exchange risk



Use quantitative or statistical methodology to measure risk

Yes, the company employs a quantitative or statistical methodology to measure foreign currency risks to financial performance



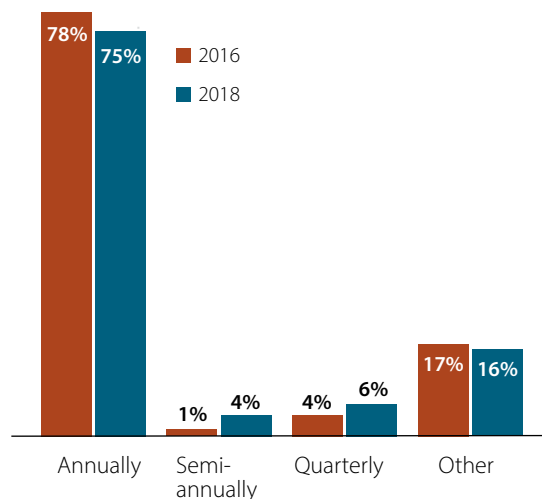
Policy includes a minimum credit rating for counterparties

Yes, the company's risk management policy specifies a minimum acceptable credit rating for counterparties



Base: Companies that have a formal written policy
2016: 184 • 2018: 216

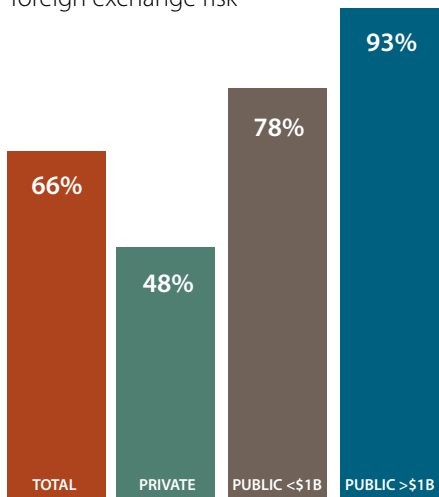
Frequency of policy review or update



Base: Companies that have a formal written policy
2016: 184 • 2018: 216

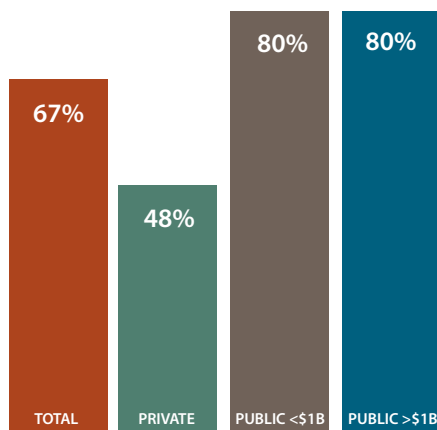
With relatively broader global footprints and facing more intense public scrutiny, large public companies (revenues greater than USD 1 B) are most likely to employ rigorous risk management policies and procedures that arguably may be characterized as best practices.

Yes, the company has a formal written policy for managing foreign exchange risk



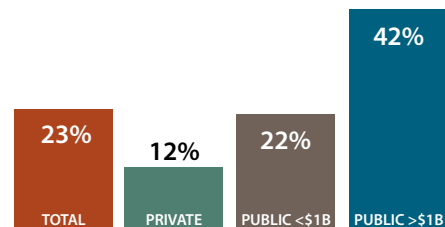
Base: Total respondents

Yes, the company's risk management policy specifies a minimum acceptable credit rating for counterparties



Base: Companies that have a formal written policy

Yes, the company employs a quantitative or statistical methodology to measure foreign currency risks to financial performance



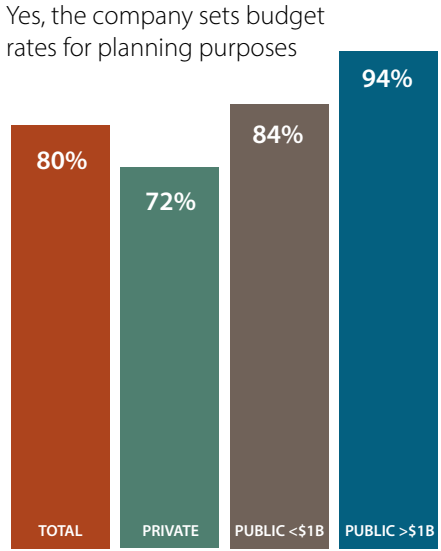
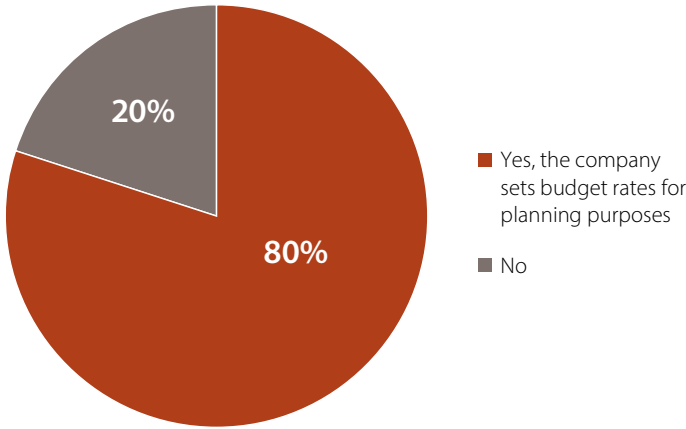
Base: Total respondents



Sydney

A majority of participants continue to set budget rates for planning purposes, with large public firms nearly universal in this practice. When setting budget rates, companies often rely on consensus forecasts, a practice that tends to be most common among firms that do incorporate budget rates in hedging decisions.

FX budget rates

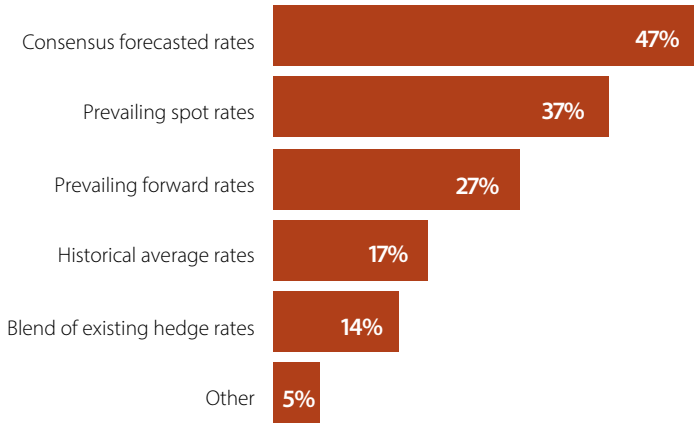


Risk management role of budget rates

	Total	Private	Public	
			<\$1 B	>\$1 B
None, only use budget rates for variance reporting	77%	71%	93%	81%
Impact choice of hedging instruments	14%	19%	4%	10%
Do not hedge if current rates are worse than budget rates	8%	11%	4%	5%
Other	3%	2%	0%	5%

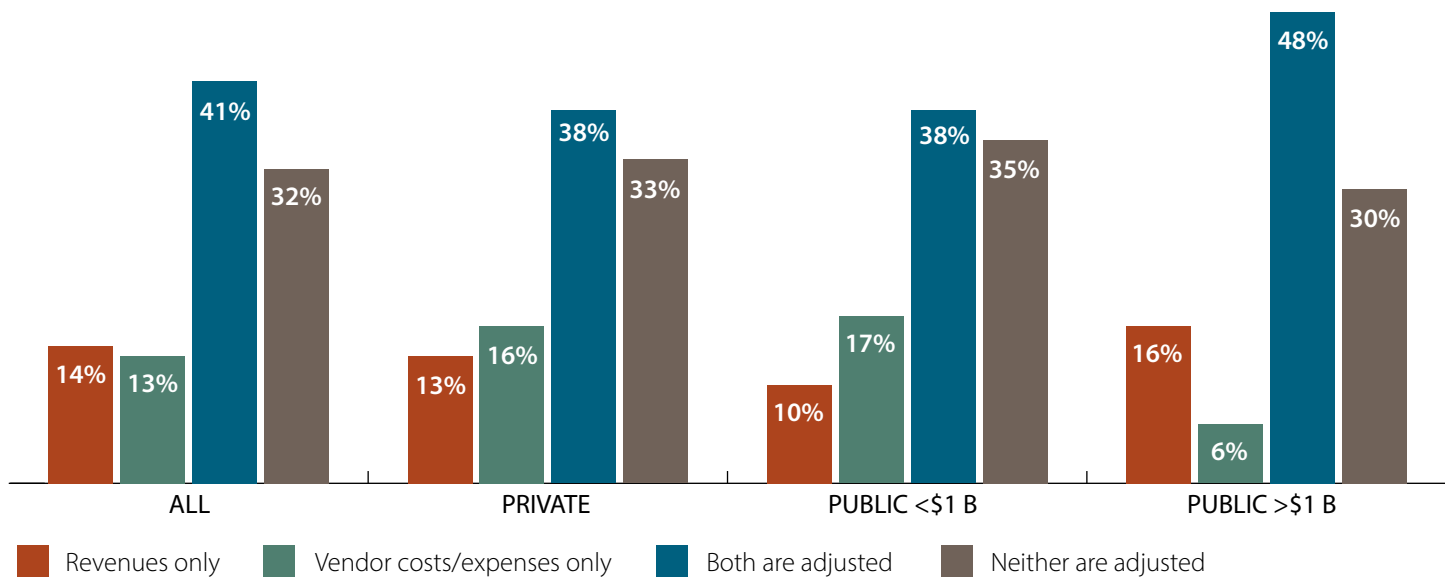
Base: Companies that set budget rates for planning purposes = 265

The following factor(s) are used in setting budget rates



Even companies that price in USD are subject to foreign exchange risk. Of foreign transactions that are denominated in USD, two of three such prices are adjusted periodically to reflect changes in exchange rates.

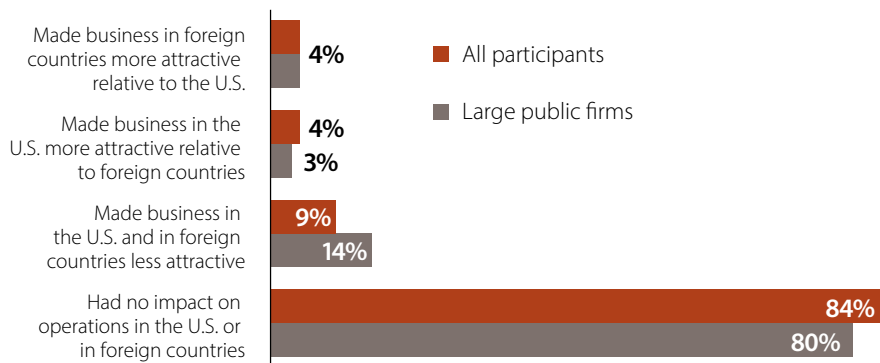
Are USD prices adjusted in response to FX changes?



Base: Prices set in USD

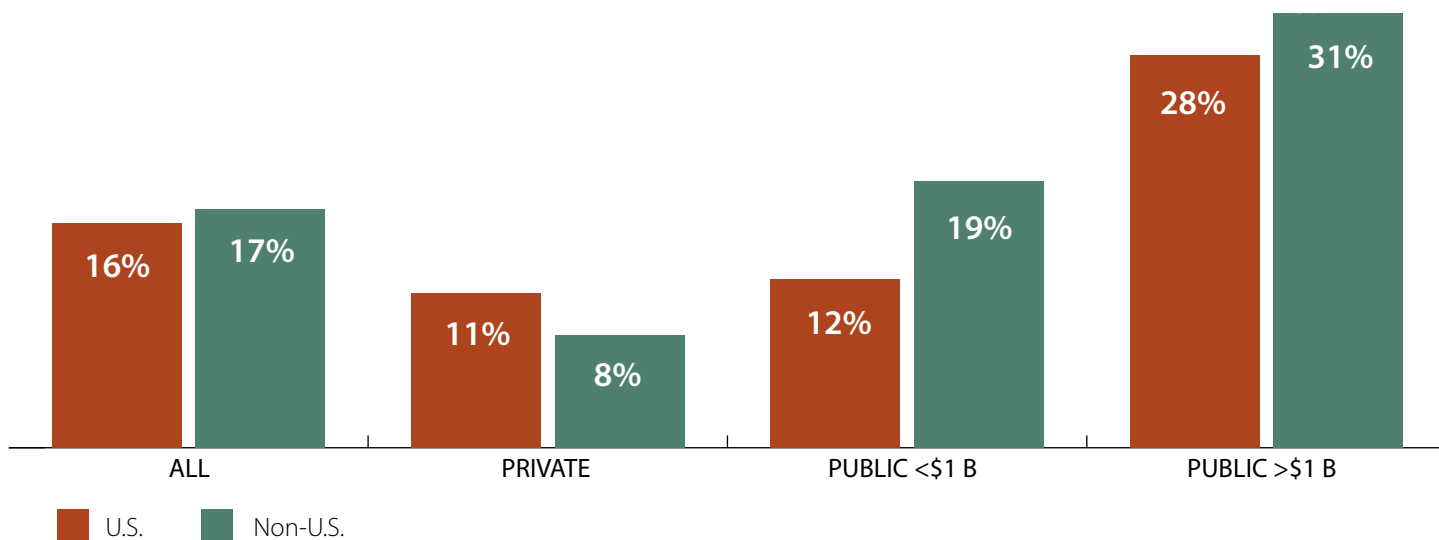


Business effects of regulatory changes during the past two years



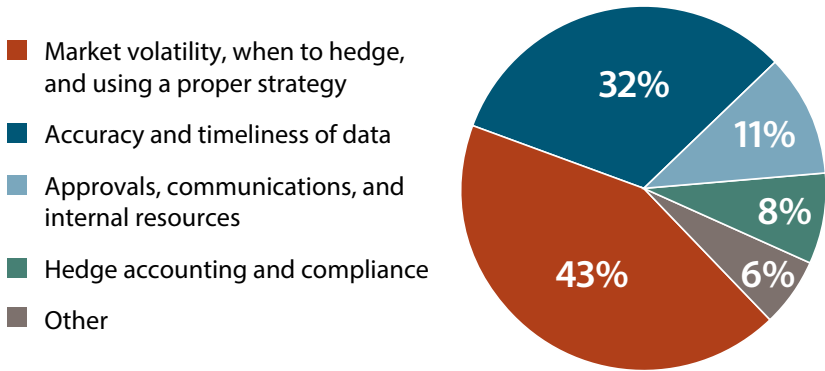
More than **1/3** of the large public companies participating in the survey indicate that U.S. or foreign regulations have either made hedging more difficult or affected trading negatively. Small public firms and private companies appear less affected by regulatory changes.

Percent reporting negative effects from U.S. and non-U.S. regulations on FX risk management during the past two years



For public firms, the accuracy and timeliness of data has become the greatest FX risk management challenge. Private firms participating in the survey report that market volatility, when to hedge, and using a proper strategy remain the greatest challenges.

Greatest FX risk management challenge: 2018



By private/public

2016

Private		Public
63%	Market volatility, when to hedge, and the proper strategy	37%
13%	Accuracy and timeliness of data	33%
13%	Approvals, communications, and internal resources	11%
7%	Hedge accounting and compliance	16%
4%	Other	4%

2018

Private		Public
55%	Market volatility, when to hedge, and the proper strategy	28%
21%	Accuracy and timeliness of data	47%
13%	Approvals, communications, and internal resources	9%
5%	Hedge accounting and compliance	13%
6%	Other	4%

Base: Total respondents

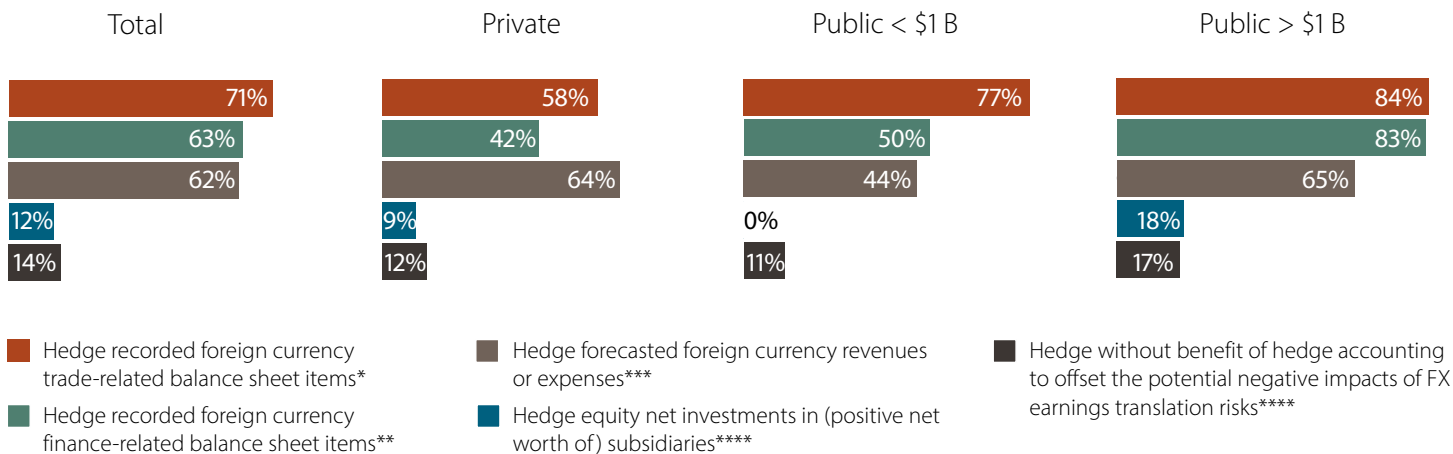
Hedging activity



Madrid

Known, recorded balance sheet items and forecasted foreign currency transactions remain the exposures most commonly hedged by survey participants. Net investment and foreign earnings translation exposures are less commonly hedged.

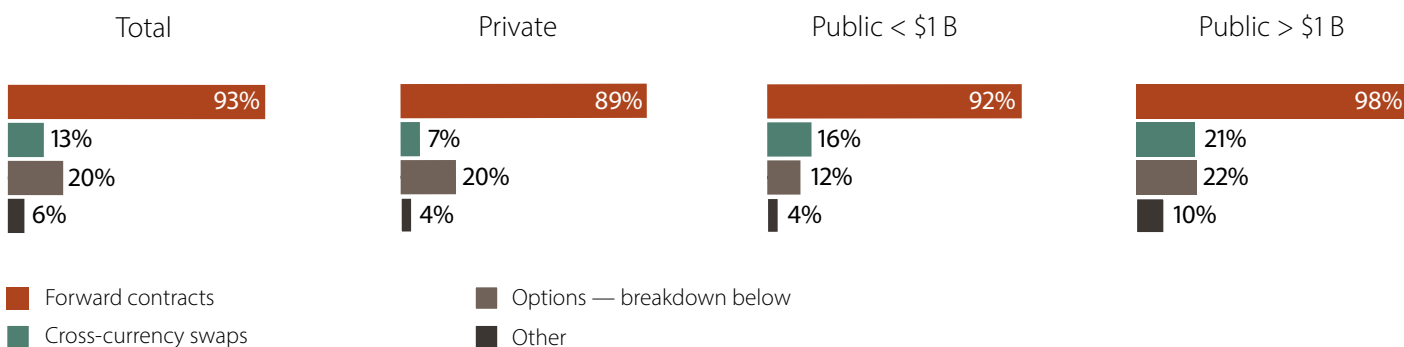
Hedge practices



Base:
 *Respondents with trade-related balance sheet items
 **Respondents with finance-related balance sheet items
 ***All respondents
 ****Respondents with local/foreign currency functional subsidiaries

FX forwards remain the instrument of choice for firms that hedge currency exposure. Roughly one in five include options in their hedging programs, and a similar proportion of large public firms employ cross-currency swaps.

Hedge instruments



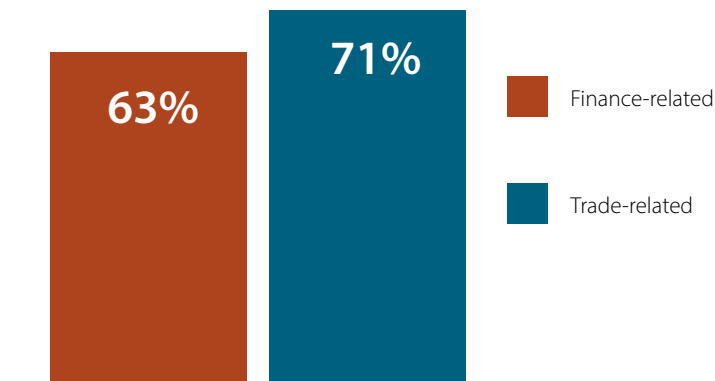
Base: Companies that hedge any foreign currency exposure

	Total	Private	Public < \$1 B	Public > \$1 B
Options (breakdown)	20%	20%	12%	22%
Purchased options	11%	11%	4%	13%
Option collars	7%	5%	8%	10%
Participating forwards	6%	7%	4%	6%
Forward extras	4%	3%	4%	6%
Average rate	1%	1%	0%	2%

Balance sheet exposures

Balance sheet positions remain the most commonly hedged exposure.

Companies that hedge nonfunctional currency booked assets or liabilities



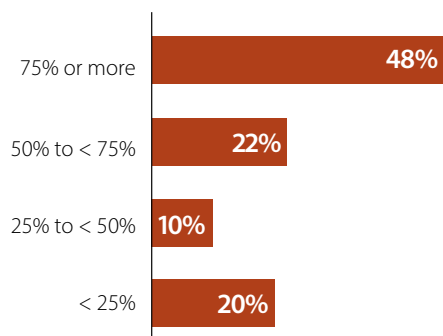
73%

Roughly three in four companies hedge nonfunctional currency booked assets or liabilities.

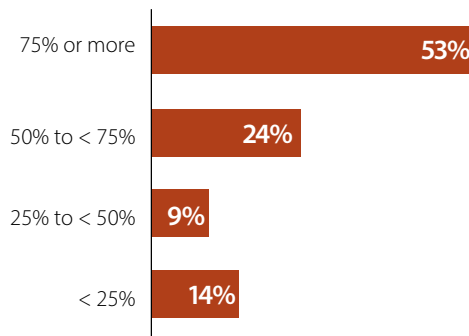
Half of the respondents that hedge balance sheet exposures hedge over 75% of the exposure while the majority of hedgers also keep hedge tenors to less than three months.

Percentage of balance sheet positions hedged

Companies that hedge trade-related foreign currency accounts = 149

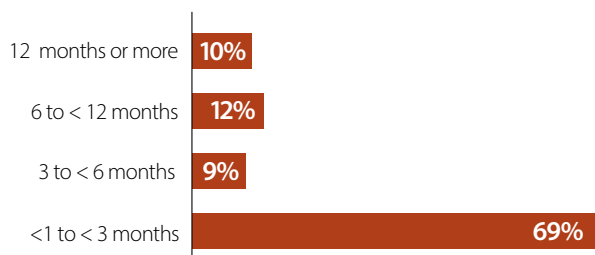


Companies that hedge finance-related foreign currency accounts = 103

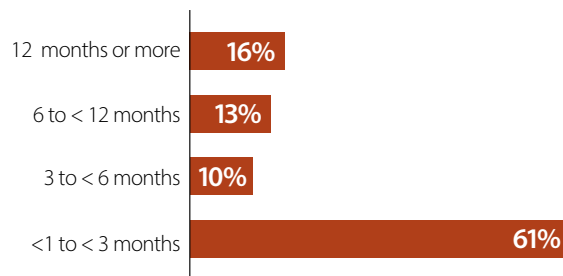


Maturities of balance sheet hedges

Companies that hedge trade-related foreign currency accounts = 149

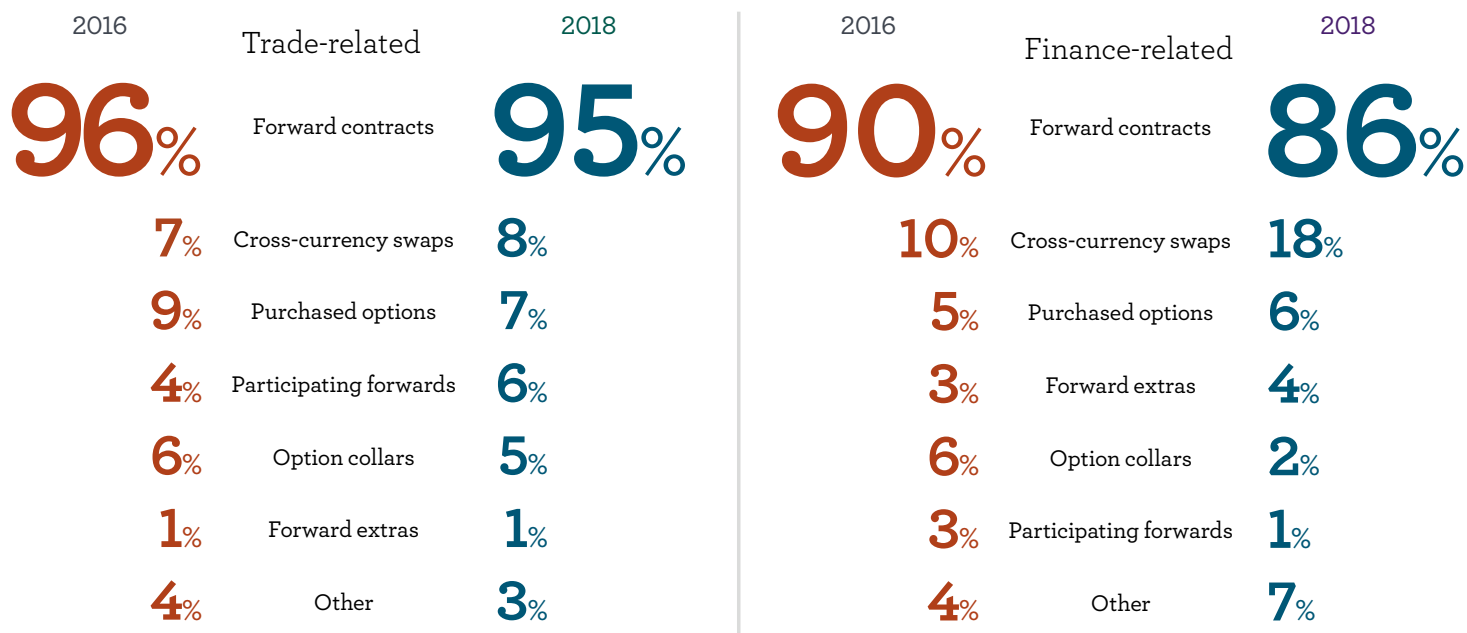


Companies that hedge finance-related foreign currency accounts = 103



Forward contracts remain the most popular instrument for hedging balance sheet exposures.

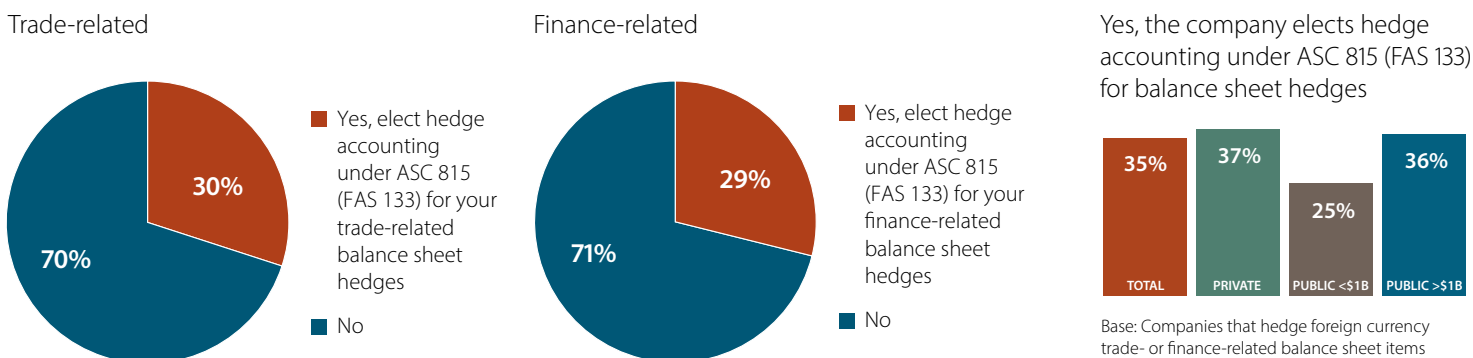
Balance sheet position hedge instruments



Some companies seem to be replacing forward contracts with cross-currency swaps for hedges of finance-related positions. Respondents hedge balance sheet positions 21% of the time with instruments other than forward contracts.

Most companies do not apply special hedge accounting treatment to hedges of balance sheet positions.

Hedge election for balance sheet positions

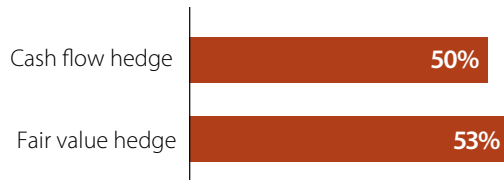


Type of hedge designation(s) for trade-related positions



Roughly one in three balance sheet hedging companies elect hedge accounting.

Type of hedge designation(s) for finance-related positions



Cash flow exposures

Nearly two in three survey participants hedge forecasted transactions.

Companies that hedge forecasted foreign currency revenues and/or expenses

Total

62%

PRIVATE

64%

PUBLIC

60%

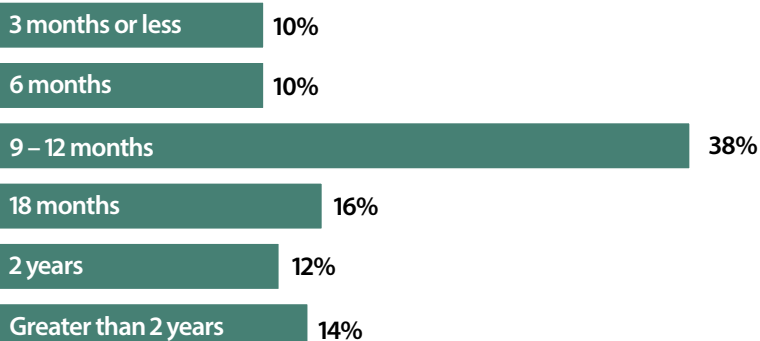
62% vs. 63%

The percentage of survey participants hedging forecasted transactions remains similar to the 2016 survey.

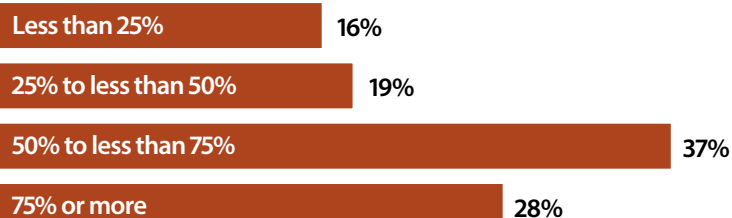
Respondents that hedge forecasted transactions tend to hedge for longer than one year and hedge coverage is generally less than 75% of the forecasted amount.

Maximum maturities for hedges of forecasted transactions

More than 40% hedge to a maximum maturity exceeding one year, and another 38% hedge to a maximum maturity falling between nine and 12 months.



Percent of forecasted transactions hedged



The categories in this figure represent average coverage ratios for hedges of all maturities.

The use of forward contracts is nearly universal for hedges of forecasted transactions. Non-forward hedge solutions are more common for forecasted transactions than for balance sheet positions.

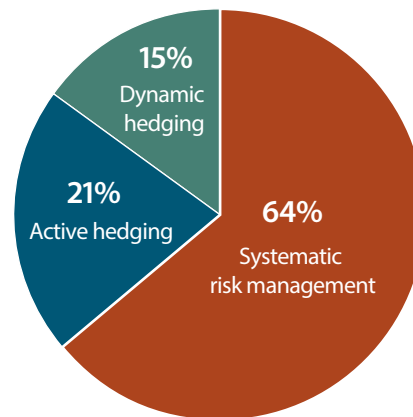
Forecasted transaction hedge instruments



Base: Companies that hedge forecasted REV or EXP (n=206)

Approach to hedging forecasted transactions

When hedging forecasted transactions, survey participants tend to take a systematic approach and often layer their hedges.



Base: Companies that hedge forecasted REV or EXP (n=206)

Systematic risk management: Hedging a fixed amount of forecasted foreign currency transactions over a specific time period at regular intervals using specific hedge instruments.

Active hedging: Discretionary hedging of forecasted foreign currency transactions based on market conditions that allows for extending the hedge horizon, changing targeted percentage amounts or discretion in the hedge instrument.

Dynamic hedging: Using discretion not only when initiating hedges, but also during the life of the hedge.

Hedging program implementation

Large or public companies are more likely to layer their hedges over time while more small or private companies use a rolling approach.

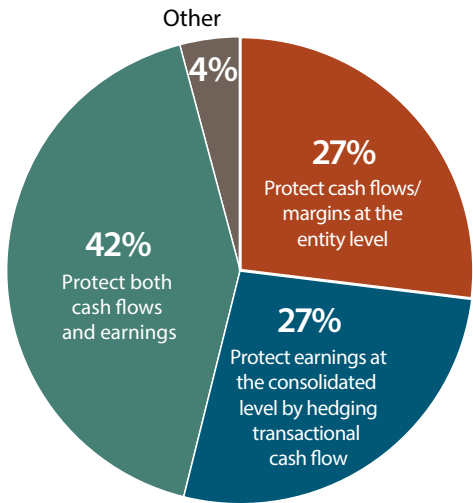


Base: Companies that hedge forecasted REV or EXP (n=206)

Base: Companies that hedge forecasted REV or EXP	Private 122	Public 84	<\$1 B 113	> \$1 B 93
Layering: The same exposure is hedged at multiple points in time. Hedge coverage of a single exposure is 'ramped up' over time.	35%	63%	31%	66%
Rolling: For each exposure, a single hedge is executed. Hedges are executed on a regular basis and with a consistent tenor to extend the hedge horizon.	44%	25%	46%	25%
Static: All hedges are placed at the beginning of the fiscal year and no additional hedges are placed until the next year.	14%	5%	16%	3%
Other	7%	7%	7%	6%

Hedges of forecasted transactions can be used to accomplish multiple objectives.

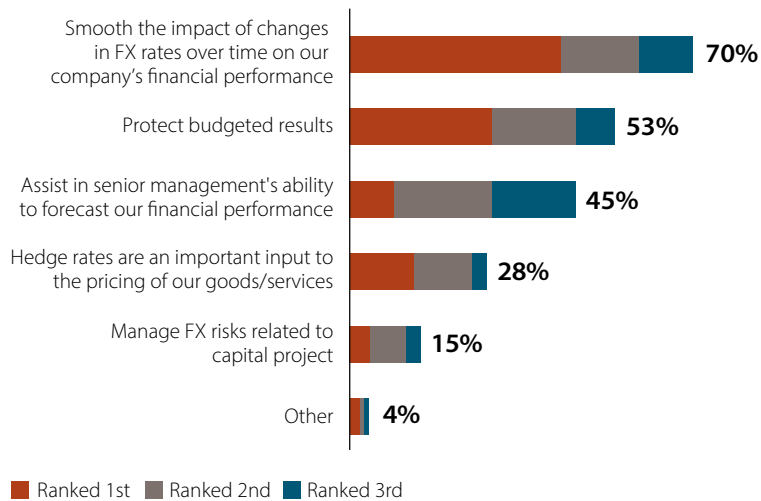
Purpose for hedging forecasted transactions



Base: Companies that hedge forecasted REV or EXP (n=206)

Base: Companies that hedge forecasted REV or EXP	Private	Public	<\$1 B	> \$1 B
Protect cash flow/margins at the entity level	122	84	113	93
Protect earnings at the consolidated level by hedging transactional cash flow	26%	29%	27%	27%
Protect both cash flows and earnings	19%	38%	22%	32%
Other	51%	30%	47%	37%
Other	4%	3%	4%	4%

Objectives for hedging forecasted transactions



Base: Companies that hedge forecasted REV or EXP = 206

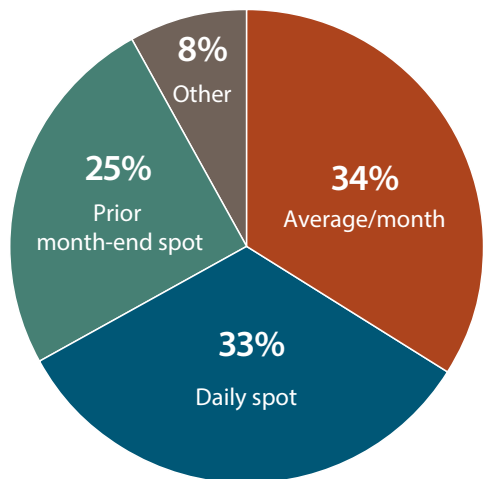
70%

of companies indicate that smoothing the impact of FX rates is one of their top three risk management objectives.

Hedge accounting practices

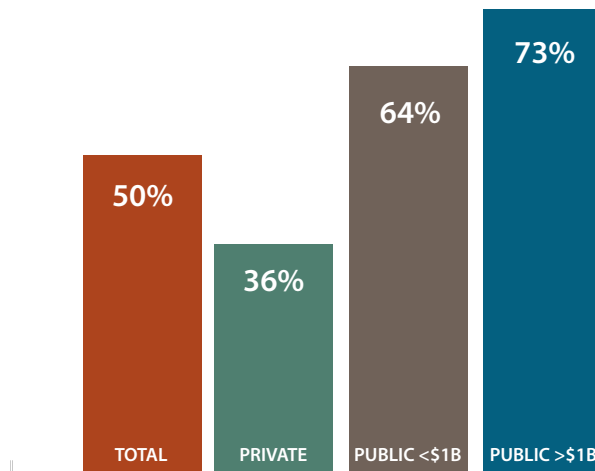
Half of companies that hedge forecasted transactions apply cash flow hedge accounting treatment.

Accounting convention to record foreign currency revenues and expenses



The average monthly rate is the most common accounting convention for foreign currency denominated transactions.

Elect hedge accounting under ASC 815 (FAS 133) for hedges of forecasted transactions



Base: Companies that hedge forecasted REV or EXP

The percentage of respondents electing special accounting for hedges of forecasted transactions decreased from 57% in 2016 to 50% in 2018.

Large public firms are far more likely to elect hedge accounting treatment for hedges of forecasted transactions than private firms.

Assistance with hedge accounting

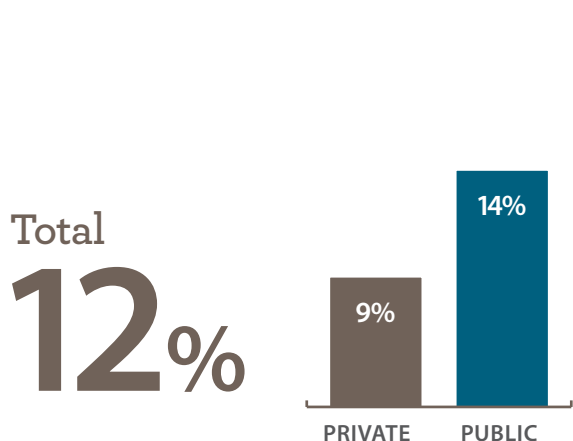
- 33%** Banking partner
- 28% Accounting/audit firm
- 25% Other third-party vendor software
- 22% None
- 14% Internal software
- 3% Other

One in three companies utilize assistance from their banking partner.

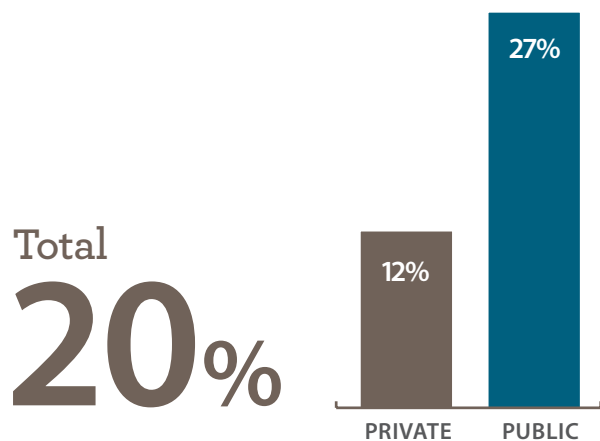
Translation exposures

Hedges of foreign earnings translation or net investment related exposures are less common than hedges of balance sheet or forecasted exposures.

Currently hedging equity net investment in foreign subsidiaries

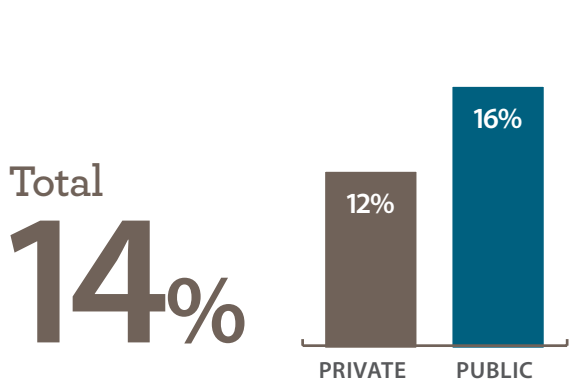


Currently hedging or in the past hedged equity net investment in foreign subsidiaries

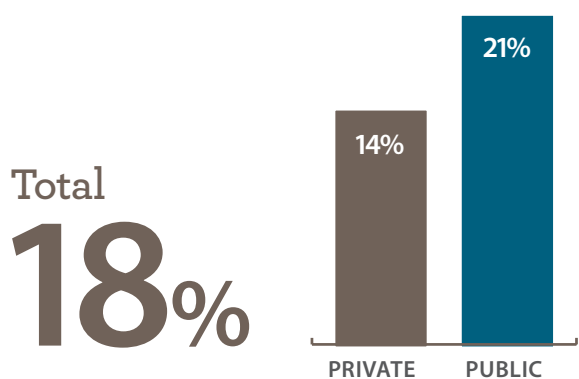


A minority of companies hedge, or in the past have hedged, their equity net investments in local currency functional subsidiaries.

Currently hedging translated value of foreign currency net income



Currently hedging or in the past hedged the translated value of foreign currency net income

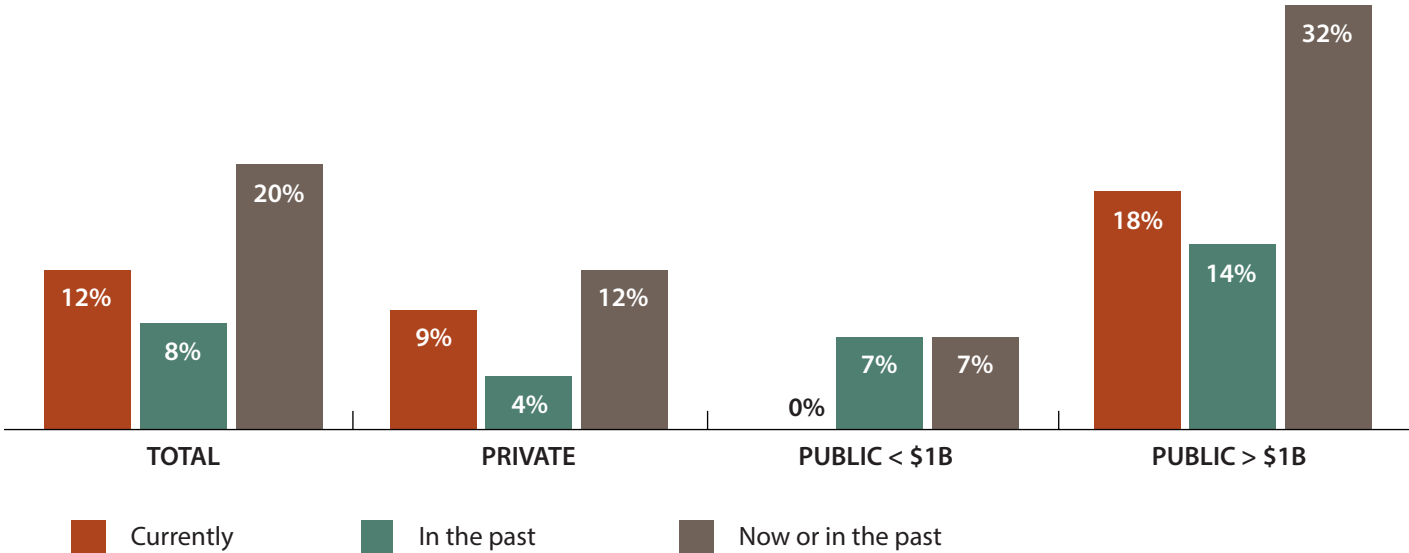


About one in seven companies report hedging the translated value of foreign currency net income.

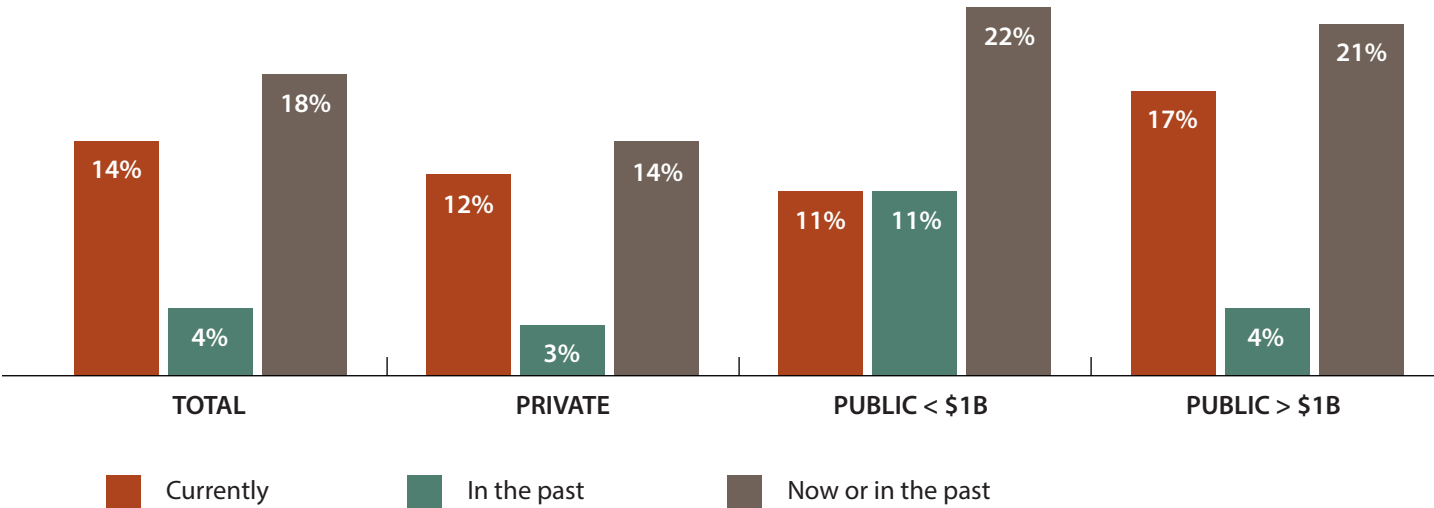
Hedging translation exposures by firm ownership and size

Large public companies are relatively more likely to hedge net investment positions. Both private and large public companies indicate greater hedging of foreign earnings translation exposures than in the past.

Firms that hedge equity net investments in (positive net worth of) foreign subsidiaries



Firms that hedge without the benefit of hedge accounting to offset potential negative effects of earnings translation risks

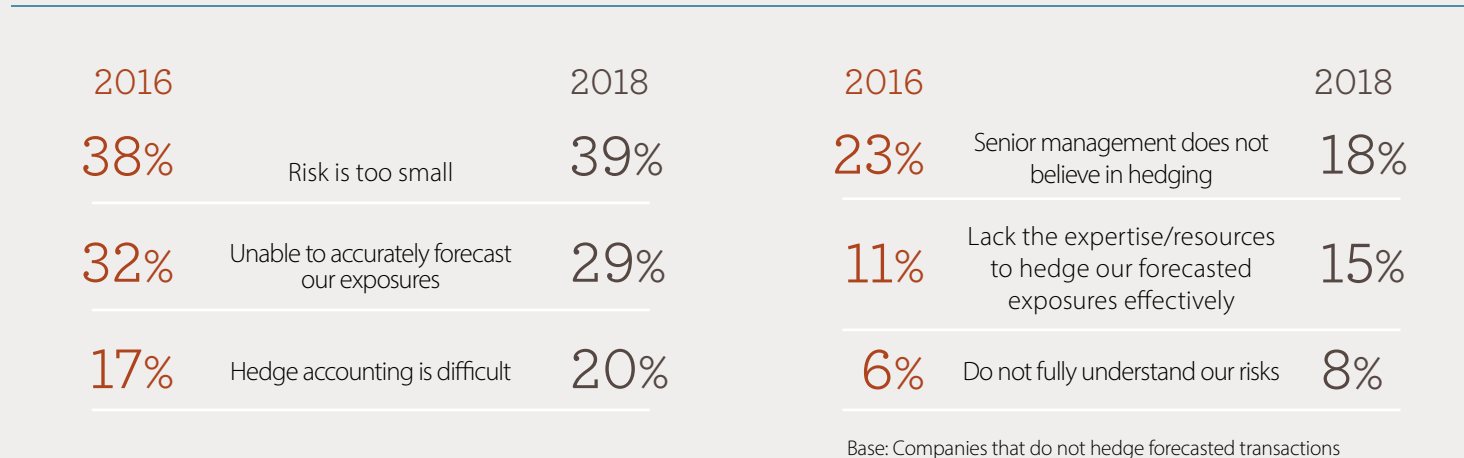


Exposure uncertainty, including the timing of settlement of balance sheet items, is the second most common factor inhibiting hedging after small exposure size. Resource constraints and other limits on the identification, tracking, and forecasting of exposures also present challenges to hedging.

Why participants do not hedge trade- and finance-related balance sheet positions



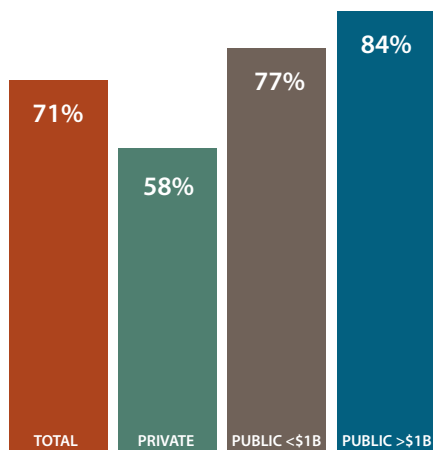
Why they do not hedge forecasted revenues or expenses



Summary: Balance sheet hedging, by firm ownership and size

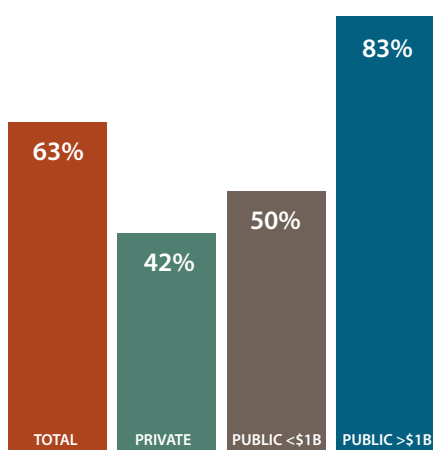
Large public companies are relatively active hedgers of balance sheet items. When hedging, they are more likely to rely on forwards and cross-currency swaps and less likely to use options than private firms.

Yes, the company hedges recorded foreign currency trade-related balance sheet positions



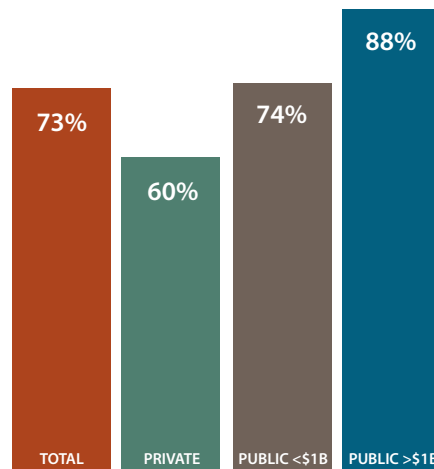
Base: Companies with trade-related balance sheet items

Yes, the company hedges recorded foreign currency finance-related balance sheet positions



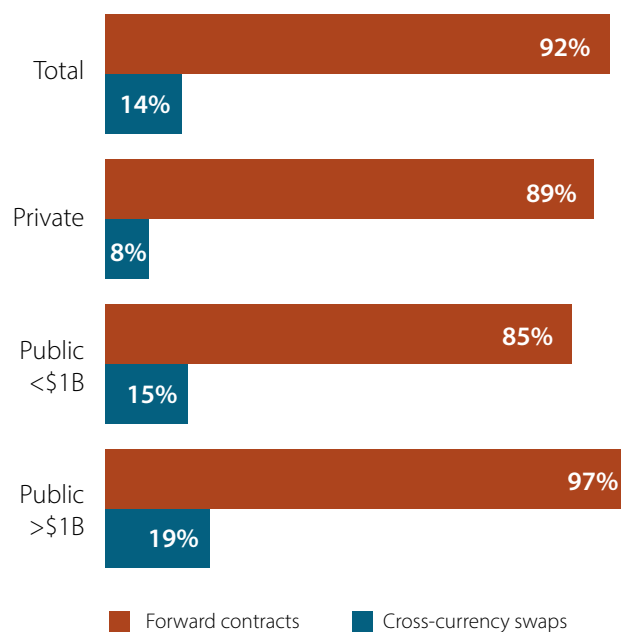
Base: Companies with finance-related balance sheet items

Yes, the company hedges recorded foreign currency trade- or finance-related balance sheet positions



Base: Companies with trade- or finance-related foreign currency balance sheet positions

Use of forwards, cross-currency swaps, and currency options



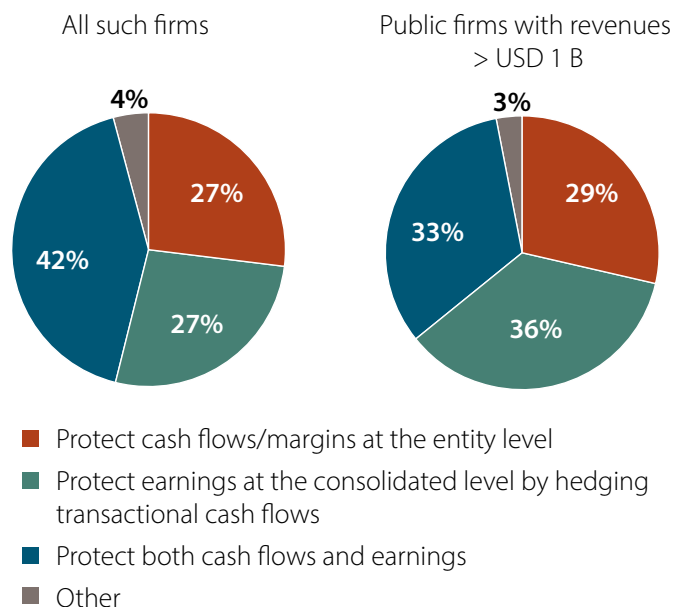
Options	Total	Private	Public	
			<\$1 B	>\$1 B
Purchased options	8%	11%	0%	8%
Option collars	5%	3%	0%	7%
Participating forwards	6%	8%	5%	5%
Forward extras	3%	3%	5%	2%

Base: Companies that hedge foreign currency trade- or finance-related balance sheet items

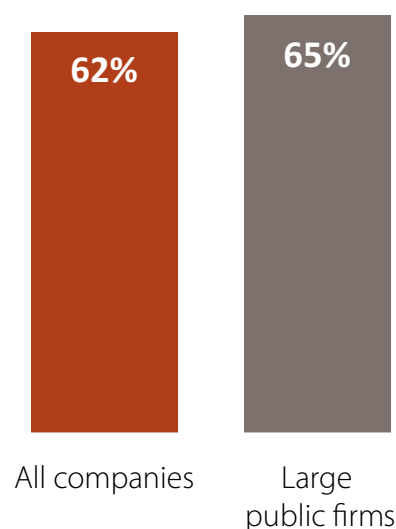
Summary: Forecasted transaction hedging, by firm ownership and size

When hedging forecasted transactions, most companies hedge greater than 50% of the notional amount.

Purpose for hedging forecasted transactions

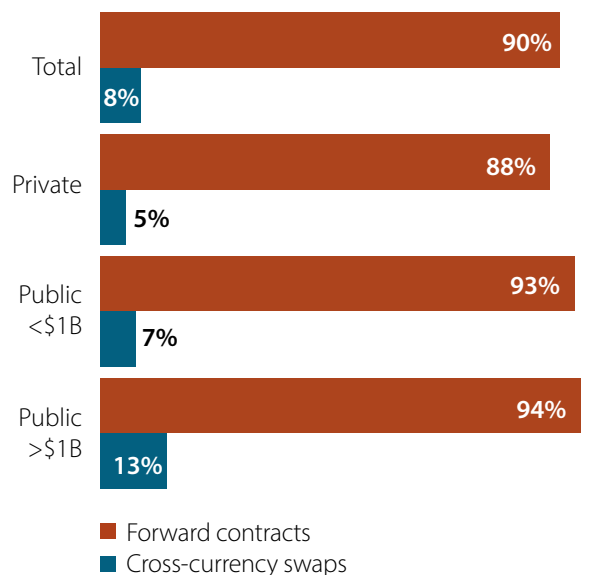


Hedge forecasted foreign currency transactions

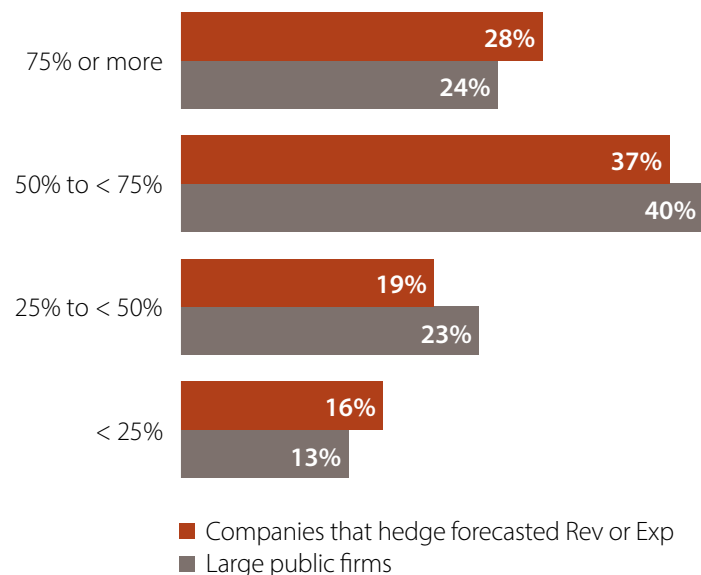


Hedge instruments

Use of forwards, cross-currency swaps, and currency options



Hedge coverage



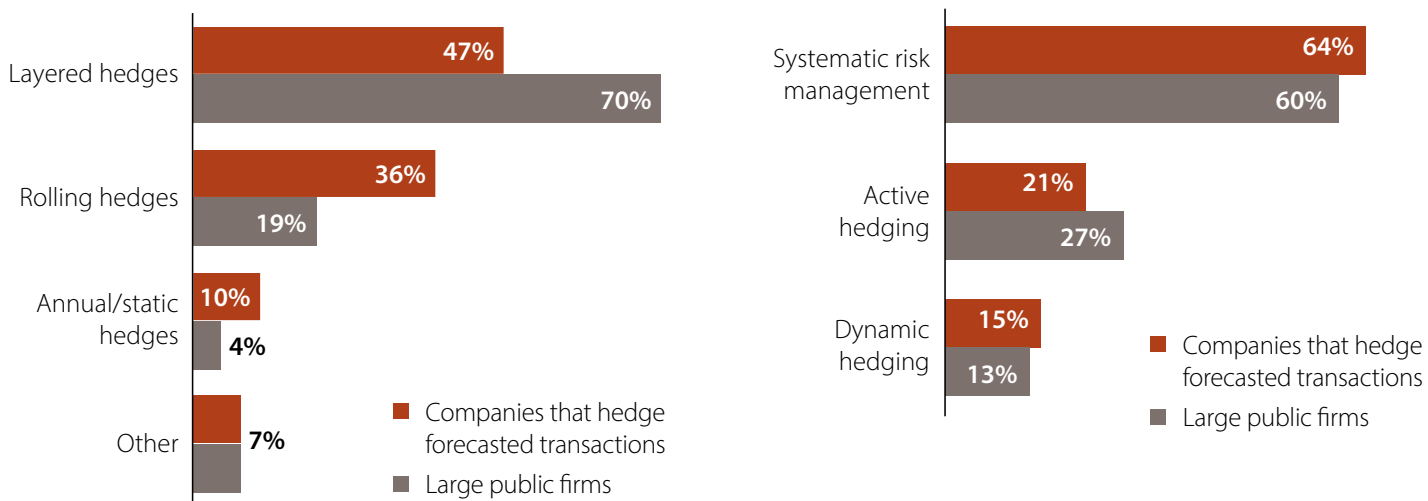
Options	Total	Private	Public	
			<\$1 B	>\$1 B
Purchased options	12%	10%	7%	16%
Option collars	7%	6%	14%	9%
Participating forwards	6%	8%	0%	4%
Forward extras	3%	2%	0%	6%

Base: Companies that hedge forecasted foreign currency revenues or expenses

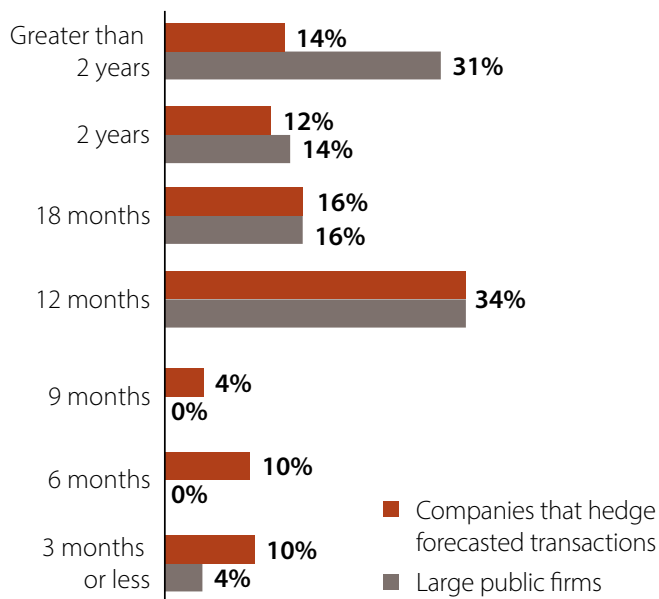
Summary: Forecasted transaction hedging, by firm ownership and size

When hedging forecasted transactions, large public companies are more likely to layer hedges, to hedge to relatively long tenors, and to designate hedges for hedge accounting.

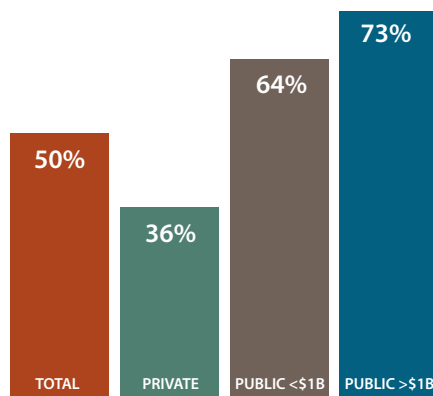
Hedge application



Maximum hedge tenor



Yes, the company elects hedge accounting under ASC 815 (FAS 133) for hedges of forecasted transactions

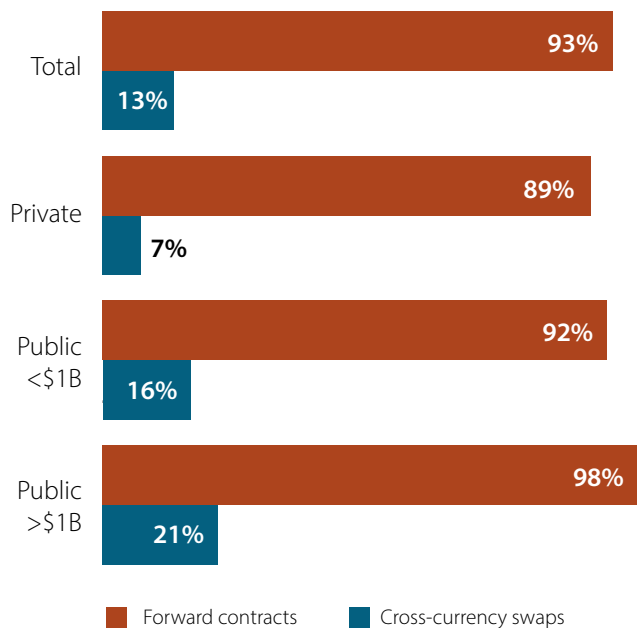


Base: Companies that hedge forecasted foreign currency transactions

Instrument usage for all hedges, by firm ownership and size

Virtually all survey participants hedge with forwards. Roughly one in five firms include options in their hedging program, and one in five large public companies include cross-currency swaps.

Use of forwards and cross-currency swaps



Options	Total	Private	Public	
			<\$1 B	>\$1 B
Purchased options	11%	11%	4%	13%
Option collars	7%	5%	8%	10%
Participating forwards	6%	7%	4%	6%
Forward extras	4%	3%	4%	6%
Average Rate	1%	1%	0%	2%

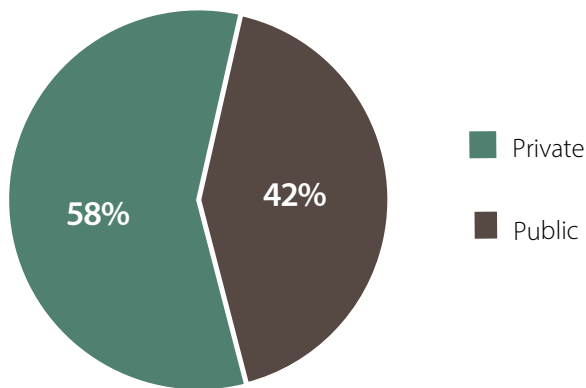
Base: Companies that hedge any foreign currency exposure

Survey participants

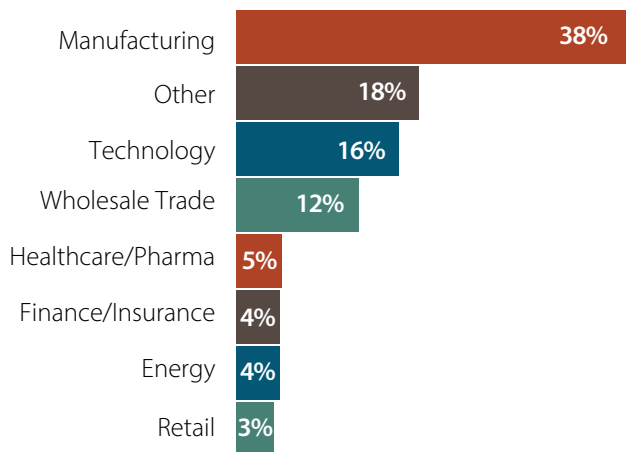


Reykjavik

Public vs. private



Industry



Parent company location

	Total
Base: Total respondents	330
U.S.	84%
Canada	5%
Germany	2%
U.K.	2%
Austria	1%
Japan	1%
Bermuda	1%
Europe (non-Euro region)	1%
Italy	1%
Netherlands	1%
Switzerland	1%

Title at company

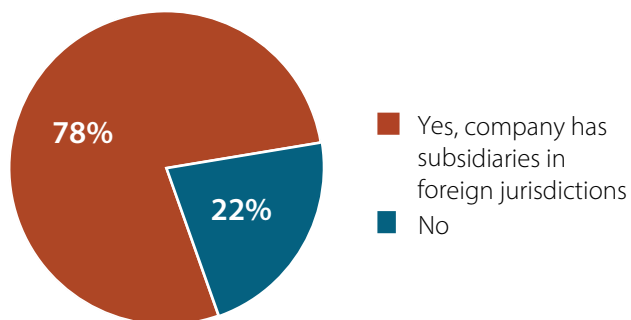
	Total
Base: Total respondents	330
Treasurer/Assistant Treasurer	38%
Finance Manager/Cash Manager	18%
CFO	18%
Controller/Account Manager	12%
CEO/President	3%
Director of Treasury/Finance	2%
Treasury Analyst	2%
Risk Manager	2%
Treasury Manager	1%
VP/Senior VP of Finance	1%

Annual revenue

	Total respondents
Base: Total respondents	330
Greater than \$5 billion	16%
\$1 billion to \$5 billion	28%
\$500 million to < \$1 billion	15%
\$100 million to < \$500 million	22%
< \$100 million	19%

Large and public companies are more likely to operate foreign subsidiaries. Nearly all large and public firms report having foreign subsidiaries, while only half to two-thirds of private and smaller companies have them.

Foreign subsidiaries



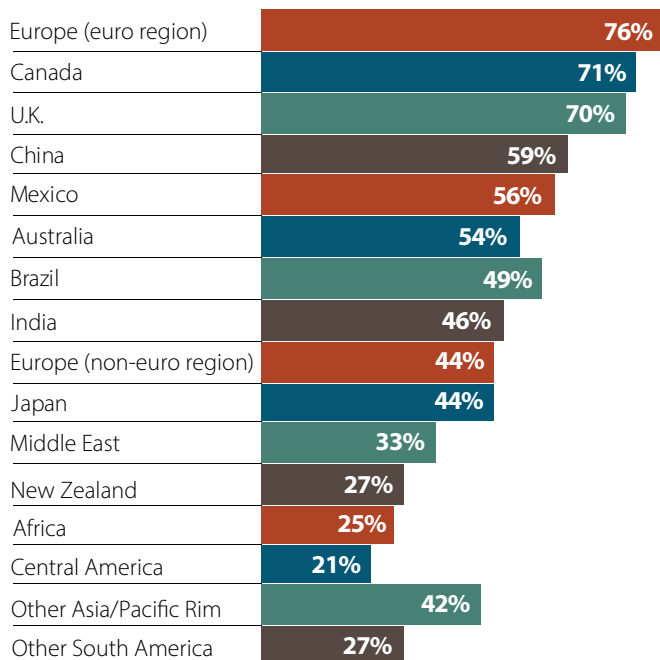
By firm ownership and size

Base: Total respondents

Yes, company has subsidiaries in foreign jurisdictions	66%	96%	64%	97%
No	34%	4%	36%	3%
	Private	Public	Revenues <\$1 B	Revenues >\$1 B

Companies appear to be enlarging the range of countries in which they have subsidiaries, with expansion into already dominant countries such as Canada, Mexico, and the U.K., as well as less common areas such as Central America, Brazil, India, and non-euro countries in Europe.

Regions where foreign subsidiaries operate



Base: International presence via foreign subsidiaries

	2016	2018
Canada	67%	71%
Mexico	52%	56%
Central America	17%	21%
Brazil	45%	49%
Other South America	23%	27%
Europe (euro region)	74%	76%
Europe (non-euro region)	38%	44%
U.K.	65%	70%
India	37%	46%
China	60%	59%
Japan	46%	44%
Australia	49%	54%
New Zealand	20%	27%
Other Asia/Pacific Rim	41%	42%
Africa	23%	25%
Middle East	23%	33%

In each geography, it is common to use the local currency as functional currency.

