

Table A1. The Exposure of Japanese Firms to the Return on the World Stock Market, Dubai Crude Oil Prices, and the Yen/Dollar Exchange Rate from 1 January 2013 to 26 April 2017.

(1)	(2)	Macroeconomic Variable					
		(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Return on World Stock Market	S.E.	Dubai Crude Oil Price	S.E.	Yen/USD Exchange Rate	S.E.
ABC-Mart	Apparel Retail	0.473***	0.098	-0.026	0.025	0.422***	0.086
Acom	Consumer Lending	1.045***	0.123	-0.035	0.043	1.392***	0.16
Aeon	Consumer Staples	0.595***	0.076	-0.047*	0.026	0.798***	0.074
Aiful	Consumer Lending	0.942***	0.161	-0.027	0.048	1.489***	0.244
Aiichi Steel	Iron & Steel	0.824***	0.095	-0.034	0.029	1.058***	0.116
Ajinomoto	Food Producers	0.642***	0.084	-0.034	0.031	0.872***	0.089
Amana	Machinery: Specialized	0.890***	0.106	-0.065***	0.024	1.352***	0.102
Amano	Elec. Equip: Controllers	0.791***	0.090	-0.046	0.028	0.876***	0.098
ANA	Airlines	0.639***	0.072	-0.050**	0.02	0.718***	0.069
As One	Medical Equip.	0.571***	0.092	-0.017	0.02	0.578***	0.089
Asahi Group Holdings	Beverages	0.643***	0.079	-0.031	0.019	0.956***	0.085
ASAHI KASEI	Chemicals	0.676***	0.097	-0.086***	0.029	1.147***	0.096
Asics	Personal Goods	0.968***	0.120	-0.047	0.031	1.06***	0.132
Astellas	Pharmaceuticals	0.753***	0.077	-0.080***	0.025	0.922***	0.09
Azbil	Elec. Equip: Gauges	0.631***	0.067	-0.045***	0.016	0.765***	0.065
Bandai Namco	Toys	0.540***	0.115	0.04	0.04	0.146	0.096
Blue Zone Holdings	Drug/Grocery	0.631***	0.092	-0.043*	0.023	0.763***	0.086
Bridgestone	Tires	0.588***	0.132	0.021	0.037	0.284***	0.101
Bunka Shutter	Building Materials	0.739***	0.098	-0.051*	0.027	1.074***	0.102
Canon	Elec. Office Equip.	0.584***	0.057	-0.051***	0.016	0.849***	0.056
Capcom	Electronic Entertainment	0.530***	0.106	-0.065**	0.031	0.616***	0.106
Casio	Consumer Electronics	0.890***	0.108	-0.099***	0.033	1.293***	0.109
Central Japan Railway	Industrial Transport	0.778***	0.102	-0.07***	0.025	1.054***	0.094
Chubu Electric Power	Electricity	0.770***	0.101	-0.056**	0.026	0.61***	0.092
Chugai Pharmaceuticals	Health Care	0.621***	0.111	-0.044	0.028	0.973***	0.128
Citizen Watch	Luxury Items	0.734***	0.112	-0.106***	0.026	1.582***	0.113
Cosmos	Oil Refining and Marketing	0.915***	0.211	-0.047	0.047	1.018***	0.214
Dai Nippon	Industrial Support Services	0.714***	0.063	-0.049***	0.017	1.032***	0.076
Daicel	Plastics	0.863***	0.099	-0.05*9	0.031	1.325***	0.102
Daifuku	Machinery: Industrial	0.790***	0.107	-0.035	0.028	1.408***	0.128

Daiichi Life	Insurance	1.084***	0.094	-0.109***	0.036	1.543***	0.123
Daiichikosho	Recreational Services	0.357***	0.094	-0.053**	0.026	0.522***	0.085
Daiwa	Home Construction	0.942***	0.085	-0.066**	0.028	1.206***	0.096
Denso	Auto Parts	0.881***	0.080	-0.051**	0.023	1.534***	0.085
DMG Mori	Machinery: Tools	1.128***	0.139	-0.083	0.057	1.758***	0.115
Dowa	Nonferrous metals	1.052***	0.112	-0.045	0.027	1.253***	0.124
East Japan Railway	Industrial Transport	0.715***	0.078	-0.066***	0.024	0.889***	0.085
Ebara	Machinery: Industrial	0.753***	0.095	-0.032	0.028	1.055***	0.101
Eneos	Oil Refining and Marketing	0.769***	0.078	-0.036	0.024	0.732***	0.093
Fanuc	Industrial Engineering	0.741***	0.103	-0.055**	0.028	1.092***	0.121
Fast Retailing	Apparel Retail	0.880***	0.120	-0.091***	0.034	1.478***	0.112
Food & Life Companies	Restaurants & Bars	-0.016	0.714	0.327*	0.151	0.914	0.798
Fujifilm	Elec. Office Equip.	0.805***	0.0775	-0.074***	0.025	1.127***	0.087
Fujijura	Electrical & Electronic Equipment	1.028***	0.101	-0.065**	0.028	1.326***	0.101
Fujita Kanko	Hotels & Motels	0.763***	0.115	-0.064**	0.034	1.222***	0.149
Fukuyama Transporting	Trucking	0.385***	0.101	0.035	0.024	0.143*	0.075
Glory	Machinery: Specialized	0.820***	0.088	-0.081***	0.024	0.979***	0.085
GMO Payment Gateway	Industrial Support Services	0.900***	0.171	-0.07*	0.042	0.642***	0.163
GNI Group	Biotechnology	0.995***	0.284	-0.04	0.056	1.063***	0.317
Goldwin	Personal Goods	0.796***	0.130	-0.028	0.036	0.916***	0.138
Hamamatsu Photonics	Semiconductors	0.622***	0.116	0.087***	0.032	0.093	0.09
Happinet	Toys	0.488***	0.159	0.031	0.043	0.127	0.105
Heiwa	Travel and Tourism	0.513***	0.103	0.054	0.034	0.031	0.068
HIS	Travel and Tourism	0.599***	0.171	-0.008	0.043	-0.099	0.137
Hitachi	Diversified Industrial	0.924***	0.101	-0.08***	0.026	1.385***	0.098
Hitachi Construction Machinery	Machinery: Construction	1.020***	0.109	-0.084***	0.03	1.387***	0.107
Hochiki	Elec. Equip.: Controllers	0.499***	0.111	-0.03	0.03	0.652***	0.097
Hokuetsu	Industrial Materials	0.745***	0.098	-0.044	0.028	1.172***	0.108
Hokuriku	Electricity	0.662***	0.095	-0.049**	0.023	0.805***	0.09
Honda	Automobiles	0.863***	0.075	-0.048**	0.023	1.324***	0.081
Horiba	Elec. Equip: Gauges	0.730***	0.088	-0.055**	0.023	1.074***	0.105

Hoshizaki	Machinery: Industrial	0.638***	0.089	-0.028	0.026	0.905***	0.096
Hoya	Health Care	0.753***	0.083	-0.033	0.025	0.929***	0.09
Ibiden	Electronic Components	1.150***	0.098	-0.07***	0.024	1.235***	0.12
Idemitsu	Oil Refining and Marketing	0.684***	0.096	-0.034	0.029	0.690***	0.101
Inabata	Plastics	0.797***	0.085	-0.036	0.024	1.133***	0.1
Inpex	Oil, Gas, Coal	0.9348	0.1176	-0.013	0.034	0.885***	0.115
Itochu	Diversified Industrial	0.876***	0.089	-0.056***	0.028	0.939	0.08
Itochu	Industrial Goods & Services	0.876***	0.089	-0.056***	0.028	0.939***	0.08
Itoka	Household Furnishings	0.654***	0.113	-0.023	0.038	0.972***	0.117
JAL	Airlines	0.541***	0.094	-0.038*	0.021	0.643***	0.086
Japan Elevators Holding Service	Industrial Suppliers	-1.599	1.882	-0.493	0.811	4.153**	1.518
Japan Oil Exploration	Oil: Crude Production	0.851***	0.109	-0.02	0.031	0.960***	0.118
Japan Post Bank	Financials	0.862***	0.136	-0.094**	0.04	0.683***	0.147
Japan Pulp and Paper	Industrial Materials	0.529***	0.056	-0.021	0.017	0.699***	0.084
Japan Tobacco	Consumer Staples	0.797***	0.085	-0.061**	0.024	0.881***	0.092
JVCKENWOOD	Consumer Electronics	0.980***	0.137	-0.088**	0.037	1.075***	0.11
JX Advanced Metals	Industrial Metals & Mines	0.526***	0.119	-0.037	0.024	0.894***	0.116
Kajima	Construction	0.751***	0.106	-0.048**	0.027	0.741***	0.106
Kamei	Oil, Gas, Coal	0.784***	0.094	-0.071***	0.027	1.063***	0.092
Kansai Electric	Electricity	0.853***	0.143	-0.068**	0.03	0.627***	0.134
Kao	Drug/Grocery	0.613***	0.089	-0.037	0.025	0.788***	0.095
Kao	Personal Products	0.613***	0.089	-0.037	0.025	0.788***	0.095
Kawasaki Kisen	Marine Transport	0.678***	0.097	-0.069***	0.023	1.247***	0.105
Keio	Travel & Leisure	0.454***	0.151	0.002	0.034	0.058	0.075
Keisei Electric	Railroads	0.783***	0.098	-0.08***	0.028	1.005***	0.079
Keyence	Electrical & Electronic Equipment	0.812***	0.093	-0.068***	0.023	1.007***	0.098
Kikkoman	Food Products	0.862***	0.089	-0.056*	0.029	1.203***	0.085
Kirin	Beverages	0.640***	0.076	-0.038*	0.023	0.97***	0.093
Kobayashi Pharmaceuticals	Personal Products	0.561***	0.090	-0.019	0.028	0.606***	0.091
Kobe Steel	Basic Resources	1.050***	0.114	-0.068**	0.033	1.580***	0.122
Kokuyo	Industrial Suppliers	0.612***	0.097	-0.036	0.025	0.784***	0.085
Komatsu	Industrial Engineering	0.871***	0.097	-0.041	0.026	1.092***	0.097
Konami	Electronic Entertainment	0.731***	0.105	-0.045	0.031	0.850***	0.093
Konica Minolta	Elec. Office Equip.	0.891***	0.101	-0.085***	0.028	1.428***	0.095
Kose	Cosmetics	0.803***	0.114	-0.013	0.037	0.896***	0.112
Kotobuki Spirits	Food Products	0.710***	0.135	-0.062**	0.03	0.545***	0.113

Kubota	Machinery: Agricultural	1.115***	0.125	-0.053*	0.028	1.466***	0.114
Kumiai Chemical	Fertilizer	0.826***	0.120	-0.069**	0.034	1.159***	0.116
Kurita Water	Elec. Equip: Pollution Control	0.677***	0.081	-0.014	0.021	0.780***	0.071
Kusuri no aoki	Drug Retailers	0.571***	0.147	-0.072*	0.04	0.428***	0.142
Kyocera	Electronic Components	0.899***	0.092	-0.04	0.026	1.321***	0.092
LY	Consumer Digital Services	0.747***	0.095	-0.054*	0.032	0.747***	0.098
MacDonalds	Restaurants & Bars	0.142*	0.082	0.009	0.021	0.117	0.074
Makita	Machinery: Tools	0.844***	0.110	-0.065**	0.026	0.928***	0.099
Marubeni	Industrial Suppliers	0.768***	0.083	-0.054**	0.026	0.960***	0.077
Matsuda Sangyo	Nonferrous metals	0.634***	0.068	-0.074**	0.03	0.684***	0.081
Matsukiyohara	Drug Retailers	0.635***	0.101	-0.043	0.027	0.778***	0.101
Max	Machinery: Tools	0.547***	0.075	-0.017	0.025	0.587***	0.066
Meiji Holdings	Food Producers	0.713***	0.091	-0.04	0.03	0.699***	0.106
Mitani Sekisan	Cement	0.494***	0.103	-0.047*	0.028	0.784***	0.138
Mitsubishi	Diversified Industrial	0.877***	0.083	-0.037	0.028	0.905***	0.082
Mitsubishi Estate	Real Estate	0.898***	0.092	-0.03	0.024	1.260***	0.109
Mitsubishi HC	Consumer Lending	1.062***	0.100	-0.063*	0.03	1.287***	0.119
Mitsubishi Heavy	Industrial Engineering	0.987***	0.099	-0.067**	0.026	1.448***	0.121
Mitsubishi Logistech	Machinery: Construction	0.638***	0.123	-0.086***	0.03	1.243***	0.131
MitsubishiUFJ	Banks	1.006***	0.094	-0.068***	0.024	1.359***	0.12
Mitsui	Industrial Goods & Services	0.767***	0.078	-0.038*	0.022	0.819***	0.072
Mitsui Fudosan	Real Estate	1.068***	0.102	-0.063**	0.029	1.452***	0.123
Mitsui Kinzoku	Nonferrous metals	0.990***	0.091	-0.058*	0.031	1.269***	0.109
Mitsui Matsushima	Oil, Gas, Coal	0.547***	0.098	-0.025	0.027	0.663***	0.103
Mitsui OSK	Marine Transport	0.844***	0.103	-0.057*	0.031	1.454***	0.102
Mizuho Financial Group	Banks	0.837***	0.079	-0.049**	0.024	1.173***	0.098
Mizuno	Recreational Products	0.766***	0.106	-0.062**	0.024	0.793***	0.094
Modec	Oil Equipment and Services	0.837***	0.113	-0.068*	0.034	0.973***	0.14
MS&AD Insurance Group	Financials	1.182***	0.109	-0.069**	0.033	1.558***	0.111
Murata	Electronic Components	0.960***	0.111	-0.034	0.035	1.528***	0.108
Nexon	Electronic Entertainment	0.867***	0.148	-0.083*	0.046	1.093***	0.155
Nichirei	Food Products	0.669***	0.088	-0.025	0.031	0.703***	0.112
Nikkon Holdings	Trucking	0.576***	0.133	0.06*1	0.033	0.134	0.108

Nintendo	Consumer Discretionary	0.986***	0.130	0	0.036	1.074***	0.144
Nippon Light Metal Holdings	Aluminum	0.875***	0.090	-0.051**	0.024	1.085***	0.087
Nippon Sanso Holdings	Chemicals	0.948***	0.103	-0.061*	0.033	1.375***	0.115
Nippon Steel	Basic Resources	1.083***	0.092	-0.066**	0.03	1.354***	0.095
Nippon Yusen	Industrial Transport	0.786***	0.096	-0.067**	0.03	1.289***	0.094
Nissui	Farming & Fishing	0.780***	0.106	-0.021	0.032	0.737***	0.117
Nitto Boseki	Industrial Materials	0.917***	0.116	-0.056*	0.032	1.507***	0.114
Nitto Denko	Basic Materials	1.046***	0.113	-0.054	0.036	1.376***	0.114
Noevir	Cosmetics	0.509***	0.080	-0.034	0.023	0.652***	0.087
Noritz	Household Appliances	0.648***	0.076	-0.035	0.021	0.841***	0.077
OBIC Business Consultants	Software	0.426***	0.133	0	0.039	-0.079	0.097
Oji Holdings	Basic Resources	0.721***	0.083	-0.042*	0.024	1.165***	0.083
Okamura	Household Furnishings	0.476***	0.100	0.014	0.027	0.791***	0.113
Olympus	Medical Equip.	0.818***	0.103	-0.045	0.028	1.318***	0.104
Oracle	Software	0.317***	0.105	0.039	0.028	0.028	0.082
Oreintal Land	Consumer Discretionary	0.603***	0.106	-0.065**	0.029	0.732***	0.071
Organo	Elec. Equip.: Controllers	0.455***	0.070	-0.019	0.02	0.576***	0.083
Oriental Land	Recreational Services	0.603***	0.106	-0.065**	0.029	0.732***	0.071
Osaka Steel	Iron & Steel	0.738***	0.107	-0.102***	0.033	0.928***	0.113
Otsuka Holdings	Pharmaceuticals	0.664***	0.101	-0.062**	0.025	0.725***	0.101
Paltac	Personal Products	0.616***	0.106	-0.023	0.029	0.583***	0.095
Panasonic	Consumer Discretionary	0.911***	0.111	-0.051*	0.027	1.362***	0.107
Rakuten	Consumer Digital Services	0.933***	0.113	-0.054	0.034	0.800***	0.116
Resort Trust	Hotels & Motels	0.633***	0.097	-0.068**	0.03	1.191***	0.14
Rinnai	Household Appliances	0.722***	0.081	-0.053**	0.023	0.787***	0.094
Rohm	Semiconductors	0.786***	0.130	0	0.034**	0.177	0.116
RoundOne	Recreational Services	0.501***	0.121	0.024	0.035	0.568***	0.122
Sakata Seed	Farming & Fishing	0.555***	0.089	-0.016	0.024	0.747***	0.092
Sangetsu	Household Furnishings	0.702***	0.081	-0.052**	0.023	0.760***	0.107
Sankyo	Travel & Leisure	0.384***	0.093	0.036	0.029	0.089	0.076
Sankyu	Trucking	0.599***	0.145	0.045	0.035	0.151	0.094
Sanrio	Toys	0.780***	0.118	0.053*	0.031	0.101	0.106
Santec Holdings	Elec. Equip.: Other	1.176***	0.226	-0.116**	0.049	0.864***	0.2
Sapporo Holdings	Beverages	0.559***	0.093	-0.037	0.026	0.99***	0.105
Secom	Industrial Support Services	0.714***	0.063	-0.049***	0.017	1.032***	0.076

Seiko	Luxury Items	0.856***	0.123	-0.098**	0.04	1.480***	0.156
Seino	Delivery Services	0.745***	0.088	-0.032	0.025	1.157***	0.092
Sekiguchi	Home Construction	0.818***	0.084	-0.046*	0.025	1.108***	0.101
Seven&i holdings	Consumer Staples	0.839***	0.080	-0.099***	0.025	0.913***	0.081
Shimamura	Apparel Retail	0.508***	0.098	-0.024	0.022	0.548***	0.084
Shimano	Recreational Products	1.019***	0.114	-0.034	0.032	1.556***	0.14
Shimizu	Construction	0.755***	0.087	-0.042*	0.025	0.855***	0.09
Shinetsu Chemicals	Basic Materials	0.886***	0.081	-0.048**	0.024	1.197***	0.097
Shinseido	Cosmetics	0.691***	0.127	-0.015	0.034	0.922***	0.106
Shionogi	Pharmaceuticals	0.825***	0.104	-0.075**	0.029	0.993***	0.115
SMC	Machinery: Industrial	0.928***	0.090	-0.053**	0.023	1.246***	0.101
Sompo	Insurance	1.121***	0.099	-0.07**	0.029	1.414***	0.097
Sony	Consumer Electronics	0.988***	0.102	0.003	0.029	1.180***	0.113
Sotetsu	Travel and Tourism	0.338**	0.135	0	0.031	0.203***	0.074
Sumitomo Bakelite	Plastics	0.558***	0.079	-0.031	0.027	0.971***	0.085
Sumitomo Chemical	Basic Materials	0.976***	0.092	-0.033	0.034	1.439***	0.104
Sumitomo Electric Industry	Auto Parts	0.935***	0.088	-0.06**	0.025	1.533***	0.087
Sumitomo Forest	Home Construction	0.803***	0.085	-0.076***	0.025	0.983***	0.091
Sumitomo Metal&Mining	Industrial Metals & Mines	1.138***	0.107	-0.081***	0.028	1.020***	0.113
Sumitomo Mitsubishi Financial Group	Banks	0.978***	0.083	-0.066***	0.025	1.344***	0.11
SUMITOMO OSAKA CEMENT	Cement	0.604***	0.082	-0.023	0.022	0.658***	0.08
Sumitomo Realty & Development	Real Estate	1.019***	0.114	-0.034	0.032	1.556***	0.14
Suzuki	Automobiles	1.079***	0.105	-0.073**	0.036	1.234***	0.11
T&D Holdings	Insurance	1.111***	0.093	-0.102**	0.031	1.462***	0.127
Taiheiyo Cement	Cement	0.731***	0.093	-0.058*	0.034	0.997***	0.108
Taisei	Construction	0.734***	0.105	-0.066**	0.027	0.709***	0.097
Takeda	Health Care	0.649***	0.082	-0.053**	0.02	0.774***	0.089
TDK	Electrical & Electronic Equipment	1.074***	0.1167	-0.061*	0.033	1.415***	0.113
Terumo	Medical Equip.	0.665***	0.085	-0.056**	0.023	1.295***	0.088
Tokio Marine Holdings	Financials	1.069***	0.091	-0.066**	0.033	1.371***	0.101
Toppan Holdings	Industrial Support Services	0.741***	0.073	-0.045**	0.019	1.058***	0.068
Toray Industries	Chemicals	0.714***	0.077	-0.051**	0.022	1.036***	0.074
Toyo Tire	Tires	1.057***	0.139	0.06	0.045	0.150	0.145
Toyota Industries	Auto Parts	1.055***	0.087	-0.065***	0.023	1.501***	0.08
Toyota Motors	Automobiles	0.868***	0.073	-0.069***	0.023	1.397***	0.078

Trend Micro	Software	0.376***	0.124	0.04	0.034	0.036	0.113
Tsuruha	Drug Retailers	0.569***	0.098	-0.046	0.029	0.469***	0.105
UACJ	Aluminum	0.761***	0.123	-0.062*	0.037	0.977***	0.132
Unicharm	Drug/Grocery	0.627***	0.095	-0.01	0.023	0.786***	0.099
Wakitech	Machinery: Construction	0.672***	0.112	-0.063**	0.029	0.905***	0.115
West Japan Railroads	Railroads	0.646***	0.082	-0.076***	0.028	0.828***	0.078
Yakult	Food Producers	0.826***	0.095	-0.052*	0.027	0.960***	0.106
Yamabiko	Machinery	0.894***	0.132	-0.059*	0.034	1.288***	0.156
Yamaha	Recreational Products	1.019***	0.114	-0.034	0.032	1.556***	0.14
Yamato	Delivery Services	0.756***	0.092	-0.086***	0.025	1.107***	0.094
Yamato Kogyo	Iron & Steel	0.713***	0.094	-0.073**	0.032	1.058***	0.119
Yokogawa Electric	Elec. Equip.: Gauges	0.863***	0.088	-0.052*	0.027	1.339***	0.107
Yokohama Rubber	Tires	0.807***	0.129	0.0561	0.037	-0.007	0.109
Zensho	Restaurants & Bars	0.224*	0.123	0.044	0.036	0.114*	0.067
Zorirushi	Household Appliances	0.403**	0.177	-0.011	0.043	0.522***	0.144

Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 1 January 2013 to 26 April 2017.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.

Table A2. The Exposure of Japanese Firms to the Breakeven Inflation Rate, the Interest Rate on Inflation-linked Bonds, and the Shadow Monetary Policy Rate from 1 January 2013 to 26 April 2017.

		Macroeconomic Variable					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Breakeven Inflation Rate	S.E.	Interest Rate on Inflation-Linked Bond	S.E.	Shadow Monetary Policy Rate	S.E.
ABC-Mart	Apparel Retail	0.015	0.029	0.026	0.029	0.005	0.024
Acom	Consumer Lending	0.066	0.061	0.091	0.063	-0.016	0.044
Aeon	Consumer Staples	0.039	0.033	0.029	0.034	0.022	0.022
Aiful	Consumer Lending	0.11	0.098	0.122	0.101	-0.035	0.072
Aiichi Steel	Iron & Steel	0.035	0.039	0.038	0.039	0.007	0.027
Ajinomoto	Food Producers	0.003	0.037	-0.006	0.039	-0.02	0.021
Amana	Machinery: Specialized	0.109	0.037	0.128***	0.038	0.005	0.027
Amano	Elec. Equip.: Controllers	0.041	0.037	0.036	0.039	0	0.022
ANA	Airlines	-0.008	0.026	-0.002	0.026	0.044**	0.02
As One	Medical Equip.	0.066	0.026	0.066***	0.025	-0.004	0.023
Asahi Group Holdings	Beverages	0.014	0.027	0.004	0.028	0.002	0.022
ASAHI KASEI	Chemicals	0.004	0.038	0.006	0.038	-0.011	0.023
Asics	Personal Goods	0.014	0.041	0.012	0.045	-0.01	0.035
Astellas	Pharmaceuticals	0.017	0.028	0.024	0.031	-0.038*	0.021
Azbil	Elec. Equip.: Gauges	0.051	0.021	0.055***	0.023	0.019	0.018
Bandai Namco	Toys	0	0.037	-0.009	0.036	-0.001	0.033
Blue Zone Holdings	Drug/Grocery	0.011	0.029	0.019	0.031	-0.013	0.026
Bridgestone	Tires	-0.044	0.035	-0.018	0.037	-0.022	0.024
Bunka Shutter	Building Materials	0.021	0.041	0	0.041	-0.007	0.032
Canon	Elec. Office Equip.	0.044**	0.021	0.027	0.022	0.023	0.017
Capcom	Electronic Entertainment	0.042	0.037	0.049	0.041	0.036	0.031
Casio	Consumer Electronics	0.071*	0.04	0.062	0.045	-0.013	0.03
Central Japan Railway	Industrial Transport	-0.01	0.031	-0.014	0.032	0.009	0.026
Chubu Electric Power	Electricity	0.061	0.039	0.085**	0.039	0.033	0.03
Chugai Pharmaceuticals	Health Care	0.061	0.053	0.074	0.054	-0.029	0.031
Citizen Watch	Luxury Items	0.075*	0.044	0.058	0.045	-0.016	0.03
Cosmos	Oil Refining and Marketing	0.013	0.065	-0.101	0.08	0.07	0.043

Dai Nippon	Industrial Support Services	0.025	0.025	0.03	0.027	-0.008	0.018
Daicel	Plastics	0.011	0.038	0.011	0.039	0.046*	0.025
Daifuku	Machinery: Industrial	0.054	0.039	0.071*	0.04	0.001	0.03
Daiichi Life	Insurance	0.247***	0.06	0.247***	0.061	0.071**	0.029
Daiichikoshoh	Recreational Services	-0.035	0.036	-0.035	0.038	0.015	0.035
Daiwa	Home Construction	0.003	0.038	-0.002	0.039	-0.014	0.028
Denso	Auto Parts	0.09***	0.031	0.087***	0.031	0.006	0.019
DMG Mori	Machinery: Tools	0.13**	0.056	0.12*	0.061	0.065*	0.039
Dowa	Nonferrous metals	0.125***	0.046	0.11**	0.049	0.015	0.036
East Japan Railway	Industrial Transport	-0.02	0.031	-0.023	0.032	0.006	0.021
Ebara	Machinery: Industrial	0.119***	0.034	0.101***	0.035	0.039	0.03
Eneos	Oil Refining and Marketing	0.034	0.026	0.017	0.027	0.033*	0.02
Fanuc	Industrial Engineering	0.108*	0.064	0.106	0.068	-0.027	0.031
Fast Retailing	Apparel Retail	0.155***	0.046	0.157***	0.044	-0.02	0.027
Food & Life Companies	Restaurants & Bars	-0.809**	0.4	-0.791	0.51	0.141	0.268
Fujifilm	Elec. Office Equip.	0.061**	0.03	0.066**	0.031	0.016	0.02
Fujijura	Electrical & Electronic Equipment	0.052	0.047	0.049	0.047	0.026	0.033
Fujita Kanko	Hotels & Motels	-0.089	0.069	-0.1	0.072	0.029	0.043
Fukuyama Transporting	Trucking	-0.054*	0.027	-0.041	0.026	-0.01	0.023
Glory	Machinery: Specialized	0.005	0.04	0	0.042	0.019	0.025
GMO Payment Gateway	Industrial Support Services	-0.037	0.064	0.009	0.066	-0.018	0.06
GNI Group	Biotechnology	0.029	0.103	-0.01	0.102	0.075	0.088
Goldwin	Personal Goods	0.033	0.044	0.025	0.044	0.02	0.038
Hamamatsu Photonics	Semiconductors	-0.048	0.033	-0.02	0.034	0.004	0.03
Happinet	Toys	0.058	0.046	0.068	0.049	-0.033	0.034
Heiwa	Travel and Tourism	-0.023	0.034	-0.004	0.036	-0.038	0.028
HIS	Travel and Tourism	-0.06	0.04	-0.049	0.043	-0.004	0.03
Hitachi	Diversified Industrial	0.112***	0.033	0.099***	0.035	0.014	0.03
Hitachi Construction Machinery	Machinery: Construction	0.071*	0.04	0.054	0.043	0.012	0.025
Hochiki	Elec. Equip.: Controllers	-0.003	0.033	0.016	0.032	-0.022	0.023

Hokuetsu	Industrial Materials	-0.002	0.04	0.021	0.039	0.032	0.03
Hokuriku	Electricity	0.045	0.036	0.056	0.036	0.02	0.034
Honda	Automobiles	0.072**	0.03	0.071**	0.029	0.031*	0.018
Horiba	Elec. Equip.: Gauges	0.08	0.037	0.07*	0.037	0.025	0.027
Hoshizaki	Machinery: Industrial	0.007	0.031	0.007	0.032	-0.041	0.026
Hoya	Health Care	0.034	0.029	0.035	0.029	0.043**	0.019
Ibiden	Electronic Components	0.058	0.033	0.053	0.034	0.065**	0.031
Idemitsu	Oil Refining and Marketing	0.047	0.039	0.035	0.041	0.048*	0.027
Inabata	Plastics	0.035	0.034	0.034	0.034	0	0.024
Inpex	Oil, Gas, Coal	0.035	0.043	0.013	0.043	0.006	0.028
Itochu	Diversified Industrial	0.054	0.033	0.04	0.035	0.051**	0.024
Itochu	Industrial Goods & Services	0.054	0.033	0.04	0.035	0.051**	0.024
Itoka	Household Furnishings	0.077	0.043	0.065	0.043	0.008	0.033
JAL	Airlines	-0.004	0.031	-0.007	0.033	0.038*	0.02
Japan Elevators Holding Service	Industrial Suppliers	-1.075	1.821	-0.685	1.758	0.93	0.766
Japan Oil Exploration	Oil: Crude Production	0.046	0.037	0.024	0.04	0.06*	0.03
Japan Post Bank	Financials	0.278	0.105	0.323***	0.118	0.008	0.033
Japan Pulp and Paper	Industrial Materials	0.01	0.024	0.007	0.024	-0.011	0.013
Japan Tobacco	Consumer Staples	0.014	0.031	-0.005	0.033	0.015	0.021
JVCKENWOOD	Consumer Electronics	0.113	0.041	0.117***	0.044	0.018	0.032
JX Advanced Metals	Industrial Metals & Mines	0.052	0.04	-0.071*	0.039	0.035	0.03
Kajima	Construction	0.021	0.04	0.029	0.04	0.027	0.031
Kamei	Oil, Gas, Coal	-0.033	0.031	-0.036	0.034	-0.004	0.03
Kansai Electric	Electricity	0.12	0.055	0.142***	0.053	0.086	0.053
Kao	Drug/Grocery	0.005	0.025	0.013	0.027	0.012	0.022
Kao	Personal Products	0.005	0.025	0.013	0.027	0.012	0.022
Kawasaki Kisen	Marine Transport	-0.004	0.043	-0.012	0.043	0.001	0.027
Keio	Travel & Leisure	-0.032	0.031	-0.014	0.033	-0.044	0.029
Keisei Electric	Railroads	0.014	0.034	0.027	0.035	-0.033	0.023
Keyence	Electrical & Electronic Equipment	0.066	0.034	0.082**	0.035	-0.002	0.024
Kikkoman	Food Products	0.012	0.037	0.006	0.038	-0.045*	0.025
Kirin	Beverages	-0.015	0.03	-0.02	0.03	0.002	0.021
Kobayashi Pharmaceuticals	Personal Products	-0.004	0.04	0.004	0.043	0.005	0.027
Kobe Steel	Basic Resources	0.049	0.048	0.042	0.05	0.037	0.045
		0.049	0.048	0.042	0.05	0.037	0.045

Kokuyo	Industrial Suppliers	0.015	0.028	0.019	0.03	0.004	0.027
Komatsu	Industrial Engineering	0.066*	0.034	0.039	0.036	0.007	0.022
Konami	Electronic Entertainment	0.088**	0.044	0.091**	0.042	-0.005	0.035
Konica Minolta	Elec. Office Equip	0.076*	0.042	0.066	0.044	0	0.027
Kose	Cosmetics	0.041	0.041	0.042	0.044	0.011	0.029
Kotobuki Spirits	Food Products	-0.079*	0.044	-0.077	0.047	-0.015	0.033
Kubota	Machinery: Agricultural	0.091	0.039	0.093**	0.04	0.008	0.026
Kumiai Chemical	Fertilizer	0.017	0.052	0.028	0.053	0.017	0.043
Kurita Water	Elec. Equip.: Pollution Control	-0.004	0.026	0.01	0.028	0.041*	0.019
Kusuri no aoki	Drug Retailers	-0.005	0.05	0.006	0.052	-0.018	0.037
Kyocera	Electronic Components	0.081**	0.036	0.086**	0.036	0.021	0.019
LY	Consumer Digital Services	0.03	0.03	-0.023	0.033	0.036	0.029
MacDonalds	Restaurants & Bars	0.014	0.024	0.012	0.025	0.002	0.018
Makita	Machinery: Tools	0.157***	0.04	0.152***	0.041	-0.007	0.021
Marubeni	Industrial Suppliers	0.038	0.03	0.019	0.032	0.026	0.022
Matsuda Sangyo	Nonferrous metals	0.024	0.033	0.015	0.037	0	0.025
Matsukiyohara	Drug Retailers	-0.017	0.036	0.01	0.037	0.014	0.028
Max	Machinery: Tools	0.037	0.03	0.035	0.029	0.002	0.019
Meiji Holdings	Food Producers	0.009	0.039	-0.001	0.04	0.01	0.031
Mitani Sekisan	Cement	0.031	0.038	0.027	0.037	0.007	0.033
Mitsubishi	Diversified Industrial	0.024	0.028	0.017	0.03	0.025	0.025
Mitsubishi Estate	Real Estate	-0.051	0.052	-0.054	0.05	-0.011	0.028
Mitsubishi HC	Consumer Lending	0.074	0.046	0.062	0.047	-0.008	0.039
Mitsubishi Heavy	Industrial Engineering	0.028	0.037	0.039	0.04	0.006	0.029
Mitsubishi Logistech	Machinery: Construction	-0.098**	0.048	-0.107**	0.051	0.026	0.048
MitsubishiUFJ	Banks	0.158***	0.05	0.16***	0.051	0.025	0.03
Mitsui	Industrial Goods & Services	0.022	0.027	0.014	0.027	0.021	0.023
Mitsui Fudosan	Real Estate	-0.007	0.05	-0.013	0.05	-0.026	0.028
Mitsui Kinzoku	Nonferrous metals	0.084**	0.039	0.083**	0.041	0.053	0.04
Mitsui Matsushima	Oil, Gas, Coal	0.065*	0.039	0.048	0.039	0.012	0.032
Mitsui OSK	Marine Transport	0.045	0.039	0.042	0.04	0.027	0.033
Mizuho Financial Group	Banks	0.104**	0.045	0.108**	0.045	0.012	0.023

Mizuno	Recreational Products	-0.012	0.046	-0.018	0.046	0.038	0.035
Modec	Oil Equipment and Services	0.066	0.048	0.049	0.05	0.021	0.045
MS&AD Insurance Group	Financials	0.122***	0.041	0.112***	0.04	0.047*	0.024
Murata	Electronic Components	0.046	0.036	0.031	0.037	0.044*	0.025
Nexon	Electronic Entertainment	-0.065	0.052	-0.091	0.055	0.067*	0.04
Nichirei	Food Products	-0.032	0.045	-0.031	0.048	0.014	0.029
Nikkon Holdings	Trucking	-0.06*	0.031	-0.043	0.032	0.004	0.024
Nintendo	Consumer Discretionary	0.036	0.062	0.044	0.062	0.013	0.046
Nippon Light Metal Holdings	Aluminum	0.044	0.044	0.046	0.045	0.026	0.034
Nippon Sanso Holdings	Chemicals	0.043	0.038	0.057	0.041	0.044	0.035
Nippon Steel	Basic Resources	0.009	0.034	-0.007	0.035	0.033	0.025
Nippon Yusen	Industrial Transport	0.01	0.036	0.02	0.04	0.048	0.031
Nissui	Farming & Fishing	0.05	0.046	0.054	0.046	0.035	0.035
Nitto Boseki	Industrial Materials	0.084**	0.042	0.100**	0.042	-0.002	0.032
Nitto Denko	Basic Materials	0.031	0.038	0.03	0.039	0.015	0.026
Noevir	Cosmetics	-0.036	0.026	-0.046*	0.027	0.018	0.021
Noritz	Household Appliances	0	0.026	0.012	0.026	-0.008	0.024
OBIC Business Consultants	Software	0	0.039	-0.004	0.04	-0.021	0.026
Oji Holdings	Basic Resources	0.025	0.035	0.014	0.034	0.048*	0.026
Okamura	Household Furnishings	-0.006	0.044	0.01	0.043	-0.022	0.029
Olympus	Medical Equip.	0.049	0.046	0.047	0.047	0.035	0.037
Oracle	Software	0.004	0.027	0.007	0.027	-0.02	0.022
Oreintal Land	Consumer Discretionary	-0.032	0.034	-0.036	0.035	-0.022	0.021
Organo	Elec. Equip.: Controllers	0.058	0.035	0.058*	0.034	0.014	0.018
Oriental Land	Recreational Services	-0.032	0.034	-0.036	0.035	-0.022	0.021
Osaka Steel	Iron & Steel	0.013	0.046	0	0.049	-0.016	0.029
Otsuka Holdings	Pharmaceuticals	0.038	0.025	0.033	0.027	-0.041*	0.023
Paltac	Personal Products	0.029	0.035	0.034	0.037	0.032	0.031
Panasonic	Consumer Discretionary	0.089*	0.04	0.08*	0.041	0.057	0.038
Rakuten	Consumer Digital Services	0.103**	0.046	0.001	0.048	0.015	0.033
Resort Trust	Hotels & Motels	0.006	0.05	0.015	0.051	-0.069*	0.039
Rinnai	Household Appliances	0.054*	0.03	0.049	0.031	-0.009	0.024

Rohm	Semiconductors	-0.007	0.039	0.017	0.04	0.017	0.036
RoundOne	Recreational Services	-0.037	0.049	-0.009	0.048	-0.057	0.038
Sakata Seed	Farming & Fishing	-0.028	0.026	-0.02	0.027	0.02	0.025
Sangetsu	Household Furnishings	0.014	0.028	0.026	0.03	-0.022	0.022
Sankyo	Travel & Leisure	-0.009	0.034	-0.002	0.033	-0.005	0.021
Sankyu	Trucking	-0.038	0.033	-0.018	0.033	0.008	0.025
Sanrio	Toys	-0.001	0.037	0.009	0.038	0.031	0.034
Santec Holdings	Elec. Equip.: Other	-0.07	0.07	-0.047	0.071	0.035	0.062
Sapporo Holdings	Beverages	0.047	0.045	0.046	0.043	-0.071*	0.025
Secom	Industrial Support Services	0.025	0.025	0.03	0.027	-0.008	0.018
Seiko	Luxury Items	0.018	0.057	0.022	0.059	-0.044	0.045
Seino	Delivery Services	0.029	0.034	0.046	0.034	-0.017	0.028
Sekiguchi	Home Construction	-0.009	0.034	-0.014	0.036	-0.009	0.023
Seven&i holdings	Consumer Staples	0.054	0.036	0.065*	0.037	0.017	0.023
Shimamura	Apparel Retail	0.01	0.027	0.025	0.027	-0.006	0.026
Shimano	Recreational Products	-0.01	0.055	-0.012	0.057	-0.021	0.03
Shimizu	Construction	0.024	0.034	0.031	0.035	0.009	0.026
Shinetsu Chemicals	Basic Materials	-0.007	0.032	0	0.033	0.008	0.02
Shinseido	Cosmetics	0.01	0.032	0.003	0.031	0.007	0.028
Shionogi	Pharmaceuticals	0.006	0.04	0.016	0.042	-0.006	0.034
SMC	Machinery: Industrial	0.142***	0.035	0.142***	0.035	-0.011	0.027
Sompo	Insurance	0.157***	0.04	0.144***	0.041	0.014	0.027
Sony	Consumer Electronics	0.033	0.044	0	0.045	0.05	0.039
Sotetsu	Travel and Tourism	-0.04	0.031	-0.021	0.032	-0.007	0.022
Sumitomo Bakelite	Plastics	0.016	0.032	0.015	0.033	0	0.024
Sumitomo Chemical	Basic Materials	0.032	0.041	0.013	0.045	0.083***	0.028
Sumitomo Electric Industry	Auto Parts	0.049	0.033	0.048	0.034	0.032	0.025
Sumitomo Forest	Home Construction	0.048	0.034	0.038	0.034	0.01	0.022
Sumitomo Metal&Mining	Industrial Metals & Mines	0.044	0.035	0.015	0.036	-0.001	0.031
Sumitomo Mitsubishi Financial Group	Banks	0.143***	0.048	0.149***	0.049	0.012	0.029
SUMITOMO OSAKA CEMENT	Cement	0.015	0.032	0.048	0.033	0.025	0.022

Sumitomo Realty & Development	Real Estate	-0.01	0.055	-0.012	0.057	-0.021	0.03
Suzuki	Automobiles	0.121***	0.043	0.119***	0.043	0.004	0.025
T&D Holdings	Insurance	0.238***	0.053	0.237***	0.053	0.084***	0.026
Taiheiyo Cement	Cement	0.035	0.051	0.055	0.054	0.052	0.041
Taisei	Construction	0.022	0.043	0.032	0.042	0.009	0.03
Takeda	Health Care	-0.01	0.033	-0.011	0.034	0.006	0.018
TDK	Electrical & Electronic Equipment	0.072**	0.034	0.069*	0.036	0.029	0.03
Terumo	Medical Equip.	0.051	0.034	0.039	0.034	-0.038	0.023
Tokio Marine Holdings	Financials	0.084**	0.038	0.08**	0.039	0.024	0.023
Toppan Holdings	Industrial Support Services	0.039	0.024	0.045*	0.023	0.016	0.016
Toray Industries	Chemicals	0.025	0.026	0.017	0.027	0.006	0.019
Toyo Tire	Tires	-0.027	0.055	0.001	0.056	0.053	0.052
Toyota Industries	Auto Parts	0.103***	0.028	0.089***	0.03	0.025	0.018
Toyota Motors	Automobiles	0.083***	0.026	0.062**	0.028	0.02	0.016
Trend Micro	Software	-0.06	0.041	-0.052	0.044	0.017	0.031
Tsuruha	Drug Retailers	-0.045	0.034	-0.036	0.034	0	0.026
UACJ	Aluminum	0.089**	0.042	0.117***	0.044	-0.042	0.041
Unicharm	Drug/Grocery	0.005	0.025	0.03	0.026	0.002	0.025
Wakitech	Machinery: Construction	0.033	0.045	0.015	0.046	-0.019	0.04
West Japan Railroads	Railroads	0.002	0.028	-0.002	0.03	0.016	0.023
Yakult	Food Producers	0.008	0.04	0.007	0.038	0.024	0.036
Yamabiko	Machinery	0.092*	0.055	0.078	0.057	0.021	0.042
Yamaha	Recreational Products	-0.01	0.055	-0.012	0.057	-0.021	0.03
Yamato	Delivery Services	-0.04	0.038	-0.028	0.041	-0.014	0.024
Yamato Kogyo	Iron & Steel	0.149***	0.049	0.126**	0.051	-0.045	0.027
Yokogawa Electric	Elec. Equip.: Gauges	0.072*	0.04	0.089**	0.041	0.032	0.028
Yokohama Rubber	Tires	-0.012	0.041	0.005	0.043	-0.012	0.037
Zensho	Restaurants & Bars	-0.032	0.03	-0.014	0.031	-0.018	0.024
Zorirushi	Household Appliances	0.05	0.051	0.05	0.055	0.018	0.047

Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 1 January 2013 to 26 April 2017.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.

Table A3. The Exposure of Japanese Firms to the Return on the World Stock Market, Dubai Crude Oil Prices, and the Yen/Dollar Exchange Rate from 27 April 2017 to 20 August 2021.

(1)	(2)	Macroeconomic Variable					
		(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Return on World Stock Market	S.E.	Dubai Crude Oil Price	S.E.	Yen/USD Exchange Rate	S.E.
ABC-Mart	Apparel Retail	0.436***	0.084	-0.049	0.035	0.12	0.113
Acom	Consumer Lending	0.325***	0.109	-0.04	0.033	0.750***	0.137
Aeon	Consumer Staples	0.411***	0.113	-0.029	0.034	0.444***	0.109
Aiful	Consumer Lending	0.536***	0.102	-0.069	0.043	0.688***	0.149
Aiichi Steel	Iron & Steel	0.505***	0.085	0	0.03	0.651***	0.133
Ajinomoto	Food Producers	0.256***	0.076	-0.009	0.023	0.091	0.12
Amana	Machinery: Specialized	0.581***	0.1	-0.04*	0.02	0.834***	0.133
Amano	Elec. Equip.: Controllers	0.451***	0.072	0	0.022	0.591***	0.153
ANA	Airlines	0.306**	0.125	-0.027	0.037	0.543***	0.162
As One	Medical Equip	0.391***	0.102	0.007	0.021	0.419**	0.171
Asahi Group Holdings	Beverages	0.445***	0.083	-0.016	0.02	0.520***	0.132
ASAHI KASEI	Chemicals	0.543***	0.086	0	0.021	0.862***	0.148
Asics	Personal Goods	0.659***	0.097	-0.038	0.043	0.537**	0.22
Astellas	Pharmaceuticals	0.461***	0.058	0.01	0.016	0.516***	0.125
Azbil	Elec. Equip.: Gauges	0.356***	0.091	-0.001	0.023	0.466***	0.124
Bandai Namco	Toys	0.234***	0.086	-0.019	0.029	0.248	0.154
Blue Zone Holdings	Drug/Grocery	0.248***	0.06	0.001	0.017	-0.025	0.131
Bridgestone	Tires	0.373***	0.098	0.006	0.015	0.079	0.105
Bunka Shutter	Building Materials	0.390***	0.063	-0.016	0.017	0.403***	0.098
Canon	Elec. Office Equip.	0.353***	0.064	-0.01	0.022	0.685***	0.148
Capcom	Electronic Entertainment	0.385***	0.098	0.024	0.032	-0.065	0.253
Casio	Consumer Electronics	0.528***	0.095	0.01	0.031	0.525***	0.182
Central Japan Railway	Industrial Transport	0.224*	0.116	-0.006	0.021	0.582***	0.145
Chubu Electric Power	Electricity	0.209***	0.052	-0.015	0.019	0.263**	0.126
Chugai Pharmaceuticals	Health Care	0.222**	0.102	-0.009	0.018	0.572***	0.143
Citizen Watch	Luxury Items	0.611***	0.111	-0.015	0.023	0.784***	0.159
Cosmos	Oil Refining and Marketing	0.524***	0.124	0.062	0.043	1.334***	0.209
Dai Nippon	Industrial Support Services	0.345***	0.057	-0.014	0.017	0.473***	0.111

Daicel	Plastics	0.471***	0.081	-0.03	0.019	0.576***	0.119
Daifuku	Machinery: Industrial	0.563***	0.116	-0.023	0.025	0.632***	0.185
Daiichi Life	Insurance	0.475***	0.101	-0.023	0.024	1.108***	0.164
Daiichikoshoh	Recreational Services	0.471***	0.085	0.035	0.031	0.408***	0.155
Daiwa	Home Construction	0.522***	0.111	-0.075**	0.029	0.570***	0.143
Denso	Auto Parts	0.585***	0.09	-0.037	0.024	0.713***	0.118
DMG Mori	Machinery: Tools	0.728***	0.086	-0.046*	0.027	1.251***	0.202
Dowa	Nonferrous metals	0.580***	0.097	-0.007	0.024	0.824***	0.164
East Japan Railway	Industrial Transport	0.246**	0.096	-0.021	0.021	0.568***	0.135
Ebara	Machinery: Industrial	0.657***	0.124	-0.011	0.022	1.008***	0.151
Eneos	Oil Refining and Marketing	0.327***	0.1	0.011	0.018	0.928***	0.128
Fanuc	Industrial Engineering	0.591***	0.113	-0.044**	0.021	0.908***	0.161
Food & Life Companies	Restaurants & Bars	0.308***	0.11	-0.033	0.036	0.094	0.173
Fujifilm	Elec. Office Equip.	0.179**	0.076	0.002	0.03	0.531***	0.139
Fujijura	Electrical & Electronic Equipment	0.745***	0.15	-0.045	0.031	1.257***	0.162
Fujita Kanko	Hotels & Motels	0.451***	0.095	-0.007	0.036	0.676***	0.188
Fukuyama Transporting	Trucking	0.307**	0.151	-0.005	0.032	0.218	0.186
Glory	Machinery: Specialized	0.547***	0.067	-0.007	0.022	0.628***	0.121
GMO Payment Gateway	Industrial Support Services	0.376***	0.121	-0.017	0.034	0.094	0.203
GNI Group	Biotechnology	0.977***	0.202	-0.025	0.051	0.781**	0.309
Goldwin	Personal Goods	0.335***	0.084	-0.029	0.028	0.513***	0.188
Hamamatsu Photonics	Semiconductors	0.196	0.164	-0.008	0.022	0.248*	0.139
Happinet	Toys	0.343***	0.102	-0.008	0.025	0.316*	0.174
Heiwa	Travel and Tourism	0.177**	0.08	-0.02	0.027	0.396***	0.127
HIS	Travel and Tourism	0.510***	0.126	-0.009	0.04	0.055	0.293
Hitachi	Diversified Industrial	0.557***	0.086	0.003	0.026	0.925***	0.146
Hitachi Construction Machinery	Machinery: Construction	0.674***	0.133	-0.005	0.025	0.911***	0.151
Hochiki	Elec. Equip.: Controllers	0.480***	0.099	-0.009	0.04	0.658***	0.176
Hokuetsu	Industrial Materials	0.496***	0.075	-0.044*	0.024	0.530***	0.153
Hokuriku	Electricity	0.273***	0.091	-0.02	0.032	0.269**	0.135
Honda	Automobiles	0.641***	0.127	-0.038	0.029	0.832***	0.131

Horiba	Elec. Equip.: Gauges	0.640***	0.096	-0.009	0.019	0.785***	0.154
Hoshizaki	Machinery: Industrial	0.467***	0.083	-0.03	0.023	0.507***	0.167
Hoya	Health Care	0.301***	0.074	-0.019	0.02	0.401**	0.157
Ibiden	Electronic Components	0.704***	0.079	-0.045	0.034	0.520**	0.207
Idemitsu	Oil Refining and Marketing	0.325***	0.078	0	0.027	1.055***	0.132
Inabata	Plastics	0.460***	0.101	-0.03	0.033	0.771***	0.138
Inpex	Oil, Gas, Coal	0.515***	0.124	0.041	0.03	0.914***	0.176
Itochu	Diversified Industrial	0.352***	0.055	-0.023	0.016	0.612***	0.104
Itochu	Industrial Goods & Services	0.352***	0.055	-0.023	0.016	0.612***	0.104
Itoka	Household Furnishings	0.470***	0.156	-0.019	0.044	0.558***	0.2
JAL	Airlines	0.346***	0.123	-0.018	0.037	0.521***	0.178
Japan Oil Exploration	Oil: Crude Production	0.552***	0.087	0.038	0.035	0.866***	0.17
Japan Pulp and Paper	Industrial Materials	0.515***	0.088	-0.047	0.037	0.407***	0.15
Japan Tobacco	Consumer Staples	0.202***	0.043	0.008	0.017	0.325***	0.104
JVCKENWOOD	Consumer Electronics	0.734***	0.133	-0.052	0.046	0.795***	0.158
Kajima	Construction	0.481***	0.102	-0.027	0.021	0.618***	0.131
Kamei	Oil, Gas, Coal	0.588***	0.111	-0.059**	0.028	0.721***	0.189
Kansai Electric	Electricity	0.298***	0.099	-0.037	0.023	0.328***	0.121
Kao	Drug/Grocery	0.264***	0.07	-0.012	0.016	0.336***	0.118
Kawasaki Kisen	Marine Transport	1.008***	0.138	-0.026	0.032	0.527***	0.172
Keio	Travel & Leisure	0.164	0.109	-0.004	0.027	0.184	0.165
Keisei Electric	Railroads	0.404***	0.097	0.003	0.026	0.483***	0.149
Keyence	Electrical & Electronic Equipment	0.421***	0.075	-0.017	0.015	0.693***	0.135
Kikkoman	Food Products	0.586***	0.094	0.016	0.025	0.703***	0.139
Kirin	Beverages	0.306***	0.07	0.008	0.016	0.409***	0.119
Kobayashi Pharmaceuticals	Personal Products	0.182	0.113	0.014	0.019	0.430***	0.161
Kobe Steel	Basic Resources	0.574***	0.135	-0.017	0.032	1.133***	0.193
Kokuyo	Industrial Suppliers	0.408***	0.059	-0.019	0.023	0.430***	0.131
Komatsu	Industrial Engineering	0.587***	0.12	-0.012	0.02	0.756***	0.13
Konami	Electronic Entertainment	0.602***	0.103	-0.019	0.026	0.455***	0.185
Konica Minolta	Elec. Office Equip	0.554***	0.117	-0.02	0.026	1.015***	0.206
Kose	Cosmetics	0.458***	0.098	0.001	0.032	0.381***	0.167
Kotobuki Spirits	Food Products	0.622***	0.125	-0.002	0.034	0.602**	0.256
Kubota	Machinery: Agricultural	0.489***	0.092	-0.028*	0.016	0.571***	0.138
Kumiai Chemical	Fertilizer	0.504***	0.117	-0.051*	0.029	0.709***	0.182

Kurita Water	Elec. Equip.: Pollution Control	0.642***	0.107	-0.029	0.02	0.344**	0.166
Kusuri no aoki	Drug Retailers	0.201**	0.092	-0.017	0.022	0.051	0.19
Kyocera	Electronic Components	0.539***	0.073	-0.058***	0.02	0.575***	0.131
LY	Consumer Digital Services	0.619***	0.122	-0.002	0.035	0.094	0.192
MacDonalds	Restaurants & Bars	0.101	0.067	0.002	0.014	0.004	0.106
Makita	Machinery: Tools	0.567***	0.068	-0.014	0.023	0.638***	0.175
Marubeni	Industrial Suppliers	0.43***	0.107	-0.008	0.022	0.968***	0.132
Matsuda Sangyo	Nonferrous metals	0.412***	0.067	-0.023	0.028	0.262**	0.132
Matsukiyohara	Drug Retailers	0.400***	0.091	-0.01	0.023	0.492***	0.172
Max	Machinery: Tools	0.523***	0.102	-0.027	0.027	0.586***	0.127
Meiji Holdings	Food Producers	0.154**	0.067	0.001	0.019	0.286***	0.102
Mitani Sekisan	Cement	0.338***	0.103	-0.059*	0.025	0.414**	0.173
Mitsubishi	Diversified Industrial	0.350***	0.062	-0.021	0.015	0.558***	0.095
Mitsubishi Estate	Real Estate	0.552***	0.093	0.017	0.017	0.523***	0.142
Mitsubishi HC	Consumer Lending	0.600***	0.087	-0.057***	0.02	0.777***	0.124
Mitsubishi Heavy	Industrial Engineering	0.419***	0.071	-0.024	0.018	0.744***	0.12
Mitsubishi Logistech	Machinery: Construction	0.676***	0.122	-0.024	0.037	1.011***	0.218
MitsubishiUFJ	Banks	0.429***	0.072	-0.02	0.025	0.941***	0.143
Mitsui	Industrial Goods & Services	0.451***	0.071	-0.01	0.017	0.646***	0.101
Mitsui Fudosan	Real Estate	0.507***	0.1	0.019	0.021	0.618***	0.162
Mitsui Kinzoku	Nonferrous metals	0.832***	0.099	-0.036	0.022	0.900***	0.185
Mitsui Matsushima	Oil, Gas, Coal	0.353***	0.069	0.019	0.022	0.590***	0.133
Mitsui OSK	Marine Transport	0.677***	0.122	-0.028	0.032	0.861***	0.174
Mizuho Financial Group	Banks	0.371***	0.071	0	0.033	0.759***	0.16
Mizuno	Recreational Products	0.619***	0.098	-0.014	0.025	0.559***	0.133
Modec	Oil Equipment and Services	0.665***	0.12	-0.008	0.039	0.913***	0.23
MS&AD Insurance Group	Financials	0.271***	0.051	-0.004	0.014	0.603***	0.103
Murata	Electronic Components	0.537***	0.11	-0.026	0.024	0.580***	0.139
Nexon	Electronic Entertainment	0.263***	0.09	0.008	0.038	0.282	0.208
Nichirei	Food Products	0.180***	0.064	-0.035	0.025	0.187	0.166
Nikkon Holdings	Trucking	0.403***	0.11	0.02	0.024	0.138	0.131
Nintendo	Consumer Discretionary	0.307***	0.075	-0.03	0.019	0.283**	0.138

Nippon Light Metal Holdings	Aluminum	0.589***	0.118	-0.012	0.023	0.774***	0.157
Nippon Sanso Holdings	Chemicals	0.539***	0.092	0.01	0.03	0.535***	0.193
Nippon Steel	Basic Resources	0.621***	0.112	-0.014	0.028	0.936***	0.181
Nippon Yusen	Industrial Transport	0.606***	0.116	-0.038	0.026	0.750***	0.146
Nissui	Farming & Fishing	0.504***	0.116	-0.019	0.032	0.676***	0.127
Nitto Boseki	Industrial Materials	0.545***	0.104	-0.024	0.03	0.577***	0.201
Nitto Denko	Basic Materials	0.498***	0.108	-0.027	0.023	0.694***	0.148
Noevir	Cosmetics	0.364***	0.091	-0.03	0.024	0.523***	0.135
Noritz	Household Appliances	0.421***	0.12	-0.01	0.031	0.470***	0.182
OBIC Business Consultants	Software	0.191	0.215	0	0.031	0.422**	0.195
Oji Holdings	Basic Resources	0.494***	0.076	-0.029	0.023	0.741***	0.14
Okamura	Household Furnishings	0.414***	0.087	-0.032	0.03	0.718***	0.141
Olympus	Medical Equip	0.548***	0.099	-0.037	0.03	0.505**	0.217
Oracle	Software	0.415***	0.089	-0.02	0.022	0.081	0.175
Oreintal Land	Consumer Discretionary	0.306***	0.079	0.001	0.018	0.370***	0.125
Organo	Elec. Equip.: Controllers	0.517***	0.081	-0.007	0.026	0.289*	0.159
Oriental Land	Recreational Services	0.306***	0.079	0.001	0.018	0.370***	0.125
Osaka Steel	Iron & Steel	0.671***	0.1	0.014	0.03	0.414**	0.173
Otsuka Holdings	Pharmaceuticals	0.227***	0.077	-0.023	0.021	0.364**	0.17
Paltac	Personal Products	0.227***	0.077	-0.023	0.021	0.364**	0.17
Panasonic	Consumer Discretionary	0.549***	0.072	0.012	0.023	0.681***	0.137
Rakuten	Consumer Digital Services	0.413***	0.105	-0.007	0.037	0.708***	0.173
Resort Trust	Hotels & Motels	0.594***	0.092	-0.008	0.034	0.615***	0.148
Rinnai	Household Appliances	0.332***	0.069	-0.01	0.018	0.417***	0.139
Rohm	Semiconductors	0.681***	0.149	-0.053	0.034	0.292	0.209
RoundOne	Recreational Services	0.579***	0.159	-0.071	0.047	0.905***	0.267
Sakata Seed	Farming & Fishing	0.242**	0.104	-0.039	0.025	0.522***	0.158
Sangetsu	Household Furnishings	0.374***	0.066	-0.028	0.021	0.52***	0.125
Sankyo	Travel & Leisure	0.175*	0.092	-0.014	0.032	0.133	0.119
Sankyu	Trucking	0.340***	0.09	0.035	0.024	0.111	0.132
Sanrio	Toys	0.345***	0.102	0.008	0.029	0.279*	0.162
Santec Holdings	Elec. Equip.: Other	0.706***	0.159	-0.005	0.039	0.948***	0.294
Sapporo Holdings	Beverages	0.439***	0.069	-0.016	0.019	0.613***	0.123

Secom	Industrial Support Services	0.345***	0.057	-0.014	0.017	0.473***	0.111
Seiko	Luxury Items	0.315***	0.076	0.024	0.022	0.537***	0.147
Seino	Delivery Services	0.344***	0.07	0.022	0.015	0.450***	0.133
Sekiguchi	Home Construction	0.359***	0.089	-0.03	0.02	0.510***	0.121
Seven&i holdings	Consumer Staples	0.397***	0.088	-0.028	0.023	0.209	0.147
Shimamura	Apparel Retail	0.402***	0.06	-0.065***	0.024	0.161	0.148
Shimano	Recreational Products	0.541***	0.135	0.009	0.022	0.530***	0.192
Shimizu	Construction	0.454***	0.089	-0.018	0.019	0.534***	0.11
Shinetsu Chemicals	Basic Materials	0.615***	0.104	-0.034	0.024	0.718***	0.146
Shinseido	Cosmetics	0.381***	0.077	0.008	0.02	0.633***	0.145
Shionogi	Pharmaceuticals	0.375***	0.075	-0.017	0.016	0.425***	0.136
SMC	Machiner: Industrial	0.666***	0.092	-0.02	0.024	0.784***	0.136
Sompo	Insurance	0.399***	0.065	0.01	0.024	0.596***	0.153
Sony	Consumer Electronics	0.513***	0.064	-0.002	0.019	0.709***	0.142
Sotetsu	Travel and Tourism	0.17	0.111	-0.001	0.027	0.268*	0.137
Sumitomo Bakelite	Plastics	0.504***	0.113	-0.005	0.027	0.978***	0.199
Sumitomo Chemical	Basic Materials	0.639***	0.1	-0.018	0.025	0.996***	0.134
Sumitomo Electric Industry	Auto Parts	0.475***	0.102	-0.03	0.023	0.824***	0.135
Sumitomo Forest	Home Construction	0.629***	0.091	-0.06*	0.031	0.416***	0.126
Sumitomo Metal&Mining	Industrial Metals & Mines	0.711***	0.099	0.001	0.026	0.541***	0.173
Sumitomo Mitsubishi Financial Group	Banks	0.395***	0.07	-0.01	0.02	0.767***	0.12
SUMITOMO OSAKA CEMENT	Cement	0.464***	0.086	-0.021	0.02	0.522***	0.12
Sumitomo Realty & Development	Real Estate	0.541***	0.135	0.009	0.022	0.530***	0.192
Suzuki	Automobiles	0.643***	0.104	-0.005	0.032	0.450**	0.19
T&D Holdings	Insurance	0.523***	0.114	-0.023	0.025	1.116***	0.158
Taiheiyo Cement	Cement	0.505***	0.106	-0.022	0.021	0.719***	0.162
Taisei	Construction	0.425***	0.089	-0.002	0.021	0.442***	0.118
Takeda	Health Care	0.350***	0.068	-0.008	0.021	0.265**	0.13
TDK	Electrical & Electronic Equipment	0.706***	0.109	-0.06**	0.026	0.702***	0.19
Terumo	Medical Equip.	0.431***	0.078	0	0.017	0.352	0.138
Tokio Marine Holdings	Financials	0.327***	0.051	0.004	0.02	0.664	0.12

Toppan Holdings	Industrial Support Services	0.489***	0.092	-0.009	0.022	0.628	0.134
Toray Industries	Chemicals	0.596***	0.102	-0.03	0.026	0.529***	0.146
Toyo Tire	Tires	0.623***	0.108	-0.008	0.033	0.179	0.198
Toyota Industries	Auto Parts	0.640***	0.077	-0.053*	0.027	0.732***	0.111
Toyota Motors	Automobiles	0.442***	0.061	-0.035**	0.016	0.732***	0.1
Trend Micro	Software	0.432***	0.102	-0.025	0.021	0.17	0.154
Tsuruha	Drug Retailers	0.285***	0.055	-0.029	0.02	0.186	0.149
UACJ	Aluminum	0.612***	0.109	-0.002	0.028	0.830***	0.187
Unicharm	Drug/Grocery	0.273***	0.059	-0.006	0.018	0.233*	0.124
Wakitech	Machinery: Construction	0.454***	0.067	0	0.022	0.614***	0.142
West Japan Railroads	Railroads	0.208*	0.108	0.001	0.025	0.637***	0.152
Yakult	Food Producers	0.274***	0.076	-0.024	0.019	0.400***	0.15
Yamabiko	Machinery	0.526***	0.088	-0.014	0.028	0.783***	0.166
Yamaha	Recreational Products	0.541***	0.135	0.009	0.022	0.530***	0.192
Yamato	Delivery Services	0.362***	0.075	0.016	0.026	0.364**	0.15
Yamato Kogyo	Iron & Steel	0.467***	0.1	-0.016	0.025	0.743***	0.159
Yokogawa Electric	Elec. Equip.: Gauges	0.735***	0.135	-0.025	0.038	1.009***	0.19
Yokohama Rubber	Tires	0.579***	0.094	0.022	0.028	0.096	0.162
Zensho	Restaurants & Bars	0.346***	0.078	-0.053*	0.026	0.163	0.142
Zorirushi	Household Appliances	0.477***	0.067	-0.016	0.031	0.403***	0.127

Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 27 April 2017 to 20 August 2021.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.

Table A4. The Exposure of Japanese Firms to the Breakeven Inflation Rate, the Interest Rate on Inflation-linked Bonds, and the Shadow Monetary Policy Rate from 27 April 2017 to 20 August 2021.

(1)	(2)	Macroeconomic Variable					
		(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Breakeven Inflation Rate	S.E.	Interest Rate on Inflation-Linked Bond	S.E.	Shadow Monetary Policy Rate	S.E.
ABC-Mart	Apparel Retail	0.116**	0.051	0.085	0.057	0.012	0.028
Acom	Consumer Lending	0.305***	0.069	0.113**	0.052	0.067**	0.029
Aeon	Consumer Staples	0.246***	0.068	0.125***	0.045	0.011	0.036
Aiful	Consumer Lending	0.380***	0.088	0.164	0.1	0.047	0.045
Aiichi Steel	Iron & Steel	0.177**	0.072	0.022	0.073	0.07*	0.039
Ajinomoto	Food Producers	0.105*	0.055	0.015	0.058	-0.006	0.036
Amana	Machinery: Specialized	0.248***	0.068	0.085	0.077	0.048	0.037
Amano	Elec. Equip.: Controllers	0.138**	0.065	0.008	0.061	0.013	0.037
ANA	Airlines	0.292***	0.094	0.109	0.071	0.05	0.036
As One	Medical Equip.	0.186**	0.082	0.026	0.059	0.017	0.04
Asahi Group Holdings	Beverages	0.170***	0.059	-0.01	0.082	0.057*	0.033
ASAHI KASEI	Chemicals	0.250***	0.074	0.038	0.095	0.052	0.043
Asics	Personal Goods	0.215*	0.113	-0.081	0.105	0.012	0.06
Astellas	Pharmaceuticals	0.219***	0.051	0.119**	0.046	-0.006	0.03
Azbil	Elec. Equip.: Gauges	0.224***	0.059	0.056	0.045	-0.014	0.033
Bandai Namco	Toys	0.004	0.065	-0.137**	0.069	-0.02	0.037
Blue Zone Holdings	Drug/Grocery	0.195***	0.068	0.103**	0.042	0.016	0.029
Bridgestone	Tires	0.031	0.056	-0.109**	0.043	-0.003	0.028
Bunka Shutter	Building Materials	0.159***	0.051	0.038	0.044	0.021	0.029
Canon	Elec. Office Equip.	0.168*	0.065	0.075	0.083	0.052	0.034
Capcom	Electronic Entertainment	0.084	0.121	-0.008	0.083	0.033	0.04
Casio	Consumer Electronics	0.227***	0.062	0.153**	0.075	0.076*	0.04
Central Japan Railway	Industrial Transport	0.252***	0.067	0.089*	0.046	0.04	0.027
Chubu Electric Power	Electricity	0.137*	0.073	-0.037	0.06	0.004	0.03
Chugai Pharmaceuticals	Health Care	0.079	0.074	0.01	0.061	0	0.042
Citizen Watch	Luxury Items	0.352***	0.086	0.132	0.083	0.051	0.036
Cosmos	Oil Refining and Marketing	0.279***	0.084	0.042	0.072	0.084	0.055
Dai Nippon	Industrial Support Services	0.130***	0.04	0.024	0.053	-0.007	0.026
Daicel	Plastics	0.238***	0.062	0.04	0.078	0.067*	0.037
Daifuku	Machinery: Industrial	0.212***	0.078	0.063	0.073	0.059	0.046

Daiichi Life	Insurance	0.487***	0.073	0.287***	0.088	0.142***	0.043
Daiichikosho	Recreational Services	-0.002	0.084	-0.045	0.072	0.084**	0.035
Daiwa	Home Construction	0.174***	0.051	0.027	0.067	0.027	0.036
Denso	Auto Parts	0.207***	0.068	0.114	0.072	0.068**	0.033
DMG Mori	Machinery: Tools	0.328***	0.08	0.143	0.127	0.055	0.048
Dowa	Nonferrous metals	0.146*	0.077	-0.003	0.078	0.065*	0.038
East Japan Railway	Industrial Transport	0.171***	0.048	0.011	0.042	0.036	0.023
Ebara	Machinery: Industrial	0.249***	0.073	0.034	0.095	0.071*	0.041
Eneos	Oil Refining and Marketing	0.167**	0.071	-0.027	0.077	0.091**	0.039
Fanuc	Industrial Engineering	0.115	0.1	0.018	0.111	0.031	0.042
Food & Life Companies	Restaurants & Bars	0.009	0.085	-0.172**	0.071	0.143**	0.052
Fujifilm	Elec. Office Equip.	0.204***	0.072	0.001	0.067	0.058*	0.035
Fujijura	Electrical & Electronic Equipment	0.312***	0.088	0.252**	0.101	0.016	0.047
Fujita Kanko	Hotels & Motels	0.292***	0.078	0.093	0.074	0.108**	0.042
Fukuyama Transporting	Trucking	-0.007	0.062	-0.142***	0.044	0.027	0.035
Glory	Machinery: Specialized	0.207***	0.052	0.056	0.06	0.014	0.029
GMO Payment Gateway	Industrial Support Services	0.279***	0.112	0.098	0.085	0	0.062
GNI Group	Biotechnology	0.182	0.145	0.058	0.12	0.056	0.089
Goldwin	Personal Goods	0.125	0.097	0.021	0.093	-0.021	0.052
Hamamatsu Photonics	Semiconductors	0.061	0.062	-0.114***	0.044	0.021	0.031
Happinet	Toys	-0.058	0.063	-0.093*	0.055	0.034	0.039
Heiwa	Travel and Tourism	-0.044	0.046	-0.152***	0.034	0.046	0.028
HIS	Travel and Tourism	-0.143	0.115	-0.188***	0.072	0.054	0.066
Hitachi	Diversified Industrial	0.159**	0.079	0.07	0.088	0.048	0.033
Hitachi Construction Machinery	Machinery: Construction	0.269***	0.081	0.121	0.098	0.100**	0.039
Hochiki	Elec. Equip.: Controllers	0.209**	0.096	0.028	0.084	0.02	0.045
Hokuetsu	Industrial Materials	0.210**	0.104	0.055	0.094	0.021	0.045
Hokuriku	Electricity	0.176***	0.057	-0.019	0.058	0.059	0.038
Honda	Automobiles	0.336***	0.052	0.175**	0.068	0.024	0.03
Horiba	Elec. Equip.: Gauges	0.310***	0.07	0.129	0.084	0.007	0.04
Hoshizaki	Machinery: Industrial	0.173**	0.074	0.025	0.072	0.037	0.044
Hoya	Health Care	0.238***	0.086	0.014	0.063	-0.043	0.033
Ibiden	Electronic Components	0.108	0.087	0.065	0.078	0.008	0.043

Idemitsu	Oil Refining and Marketing	0.263***	0.059	0.07	0.061	0.018	0.041
Inabata	Plastics	0.251***	0.059	0.06	0.056	0.066**	0.03
Inpex	Oil, Gas, Coal	0.214**	0.092	-0.051	0.13	0.096*	0.049
Itochu	Diversified Industrial	0.151***	0.053	0.013	0.055	0.081***	0.027
Itochu	Industrial Goods & Services	0.151***	0.053	0.013	0.055	0.081***	0.027
Itoka	Household Furnishings	0.492***	0.106	0.247***	0.088	0.011	0.049
JAL	Airlines	0.174***	0.056	-0.004	0.102	0.112***	0.039
Japan Oil Exploration	Oil: Crude Production	0.169*	0.09	0.039	0.087	0.055	0.045
Japan Pulp and Paper	Industrial Materials	0.291***	0.063	0.156***	0.054	-0.013	0.034
Japan Tobacco	Consumer Staples	0.128***	0.036	0.087**	0.042	0.024	0.021
JVCKENWOOD	Consumer Electronics	0.242***	0.078	0.078	0.086	0.053	0.052
Kajima	Construction	0.164***	0.057	0.053	0.062	0.061*	0.035
Kamei	Oil, Gas, Coal	0.411***	0.083	0.231***	0.073	0.002	0.046
Kansai Electric	Electricity	0.042	0.056	-0.091	0.084	0.066*	0.038
Kao	Drug/Grocery	0.234***	0.071	0.065	0.048	0.018	0.026
Kawasaki Kisen	Marine Transport	0.427***	0.099	0.204	0.13	0.092*	0.055
Keio	Travel & Leisure	0.009	0.058	-0.089**	0.043	0.007	0.032
Keisei Electric	Railroads	0.169***	0.06	0.072	0.064	0.058*	0.031
Keyence	Electrical & Electronic Equipment	0.143**	0.066	0.076	0.063	-0.017	0.038
Kikkoman	Food Products	0.195***	0.058	0.048	0.071	0.014	0.039
Kirin	Beverages	0.293***	0.084	0.129**	0.055	0.029	0.033
Kobayashi Pharmaceuticals	Personal Products	0.199**	0.09	0.035	0.055	-0.027	0.043
Kobe Steel	Basic Resources	0.429***	0.079	0.24***	0.075	0.088*	0.053
Kokuyo	Industrial Suppliers	0.225***	0.061	0.047	0.063	0.041	0.033
Komatsu	Industrial Engineering	0.278***	0.084	0.084	0.096	0.09**	0.04
Konami	Electronic Entertainment	-0.014	0.112	-0.096	0.103	0.046	0.044
Konica Minolta	Elec. Office Equip.	0.168*	0.1	0.012	0.12	0.097**	0.046
Kose	Cosmetics	0.254***	0.085	0.093	0.076	0.032	0.041
Kotobuki Spirits	Food Products	0.187*	0.098	0.086	0.096	0.17***	0.048
Kubota	Machinery: Agricultural	0.301***	0.059	0.118***	0.051	0.048	0.033
Kumiai Chemical	Fertilizer	0.268***	0.102	0.1	0.065	0.045	0.042
Kurita Water	Elec. Equip.: Pollution Control	0.300**	0.118	0.164	0.104	0.014	0.042
Kusuri no aoki	Drug Retailers	0.154*	0.089	0.079	0.058	0.003	0.044
Kyocera	Electronic Components	0.228***	0.057	0.062	0.083	0.042	0.029
LY	Consumer Digital Services	0.171*	0.095	0.174*	0.092	0.045	0.044
MacDonalds	Restaurants & Bars	0.031	0.034	-0.023	0.027	0.015	0.021
Makita	Machinery: Tools	0.200***	0.065	0.121	0.085	0.045	0.04

Marubeni	Industrial Suppliers	0.261***	0.071	0.113	0.088	0.087**	0.04
Matsuda Sangyo	Nonferrous metals	0.198***	0.067	-0.017	0.051	-0.001	0.03
Matsukiyohara	Drug Retailers	0.205*	0.118	0.107	0.074	0.052	0.041
Max	Machinery: Tools	0.153*	0.083	0.022	0.091	0.041	0.039
Meiji Holdings	Food Producers	0.137***	0.046	0.039	0.042	-0.01	0.028
Mitani Sekisan	Cement	0.346***	0.09	0.19*	0.102	-0.077	0.049
Mitsubishi	Diversified Industrial	0.223***	0.045	0.086	0.055	0.044	0.029
Mitsubishi Estate	Real Estate	0.080	0.08	-0.05	0.081	0.019	0.03
Mitsubishi HC	Consumer Lending	0.318***	0.059	0.117*	0.064	0.041	0.033
Mitsubishi Heavy	Industrial Engineering	0.202***	0.064	0.04	0.082	0.051*	0.029
Mitsubishi Logistech	Machinery: Construction	0.192	0.126	-0.006	0.132	0.097	0.062
MitsubishiUFJ	Banks	0.273***	0.064	0.109	0.069	0.086***	0.032
Mitsui	Industrial Goods & Services	0.287***	0.047	0.123**	0.054	0.047	0.03
Mitsui Fudosan	Real Estate	0.148**	0.065	-0.039	0.09	0.046	0.037
Mitsui Kinzoku	Nonferrous metals	0.316***	0.09	0.16	0.114	0.008	0.058
Mitsui Matsushima	Oil, Gas, Coal	0.237***	0.058	0.071	0.057	0.077**	0.038
Mitsui OSK	Marine Transport	0.266***	0.075	0.062	0.104	0.094**	0.045
Mizuho Financial Group	Banks	0.236***	0.048	0.097*	0.05	0.063**	0.032
Mizuno	Recreational Products	0.131	0.082	0.004	0.09	0.039	0.042
Modec	Oil Equipment and Services	0.219	0.135	-0.027	0.133	0.098	0.062
MS&AD Insurance Group	Financials	0.135***	0.041	-0.012	0.047	0.057**	0.026
Murata	Electronic Components	0.216***	0.067	0.132*	0.068	0.011	0.038
Nexon	Electronic Entertainment	0.271***	0.08	0.17**	0.075	0.005	0.055
Nichirei	Food Products	0.115*	0.061	-0.057	0.065	0.037	0.038
Nikkon Holdings	Trucking	0	0.052	-0.083**	0.035	0.008	0.034
Nintendo	Consumer Discretionary	0.156**	0.072	0.054	0.069	0.072*	0.042
Nippon Light Metal Holdings	Aluminum	0.208***	0.072	0.068	0.078	0.046	0.037
Nippon Sanso Holdings	Chemicals	0.175	0.136	-0.033	0.128	0.014	0.049
Nippon Steel	Basic Resources	0.329***	0.068	0.171**	0.068	0.086**	0.037
Nippon Yusen	Industrial Transport	0.315***	0.073	0.065	0.097	0.049	0.046
Nissui	Farming & Fishing	0.270***	0.062	0.085	0.068	0.032	0.032
Nitto Boseki	Industrial Materials	0.265***	0.088	0.186***	0.07	0.031	0.056
Nitto Denko	Basic Materials	0.271***	0.062	0.155*	0.087	0.038	0.035
Noevir	Cosmetics	0.271***	0.063	0.092*	0.045	0.012	0.038
Noritz	Household Appliances	0.430***	0.08	0.207***	0.058	0.034	0.038

OBIC Business Consultants	Software	0.037	0.101	-0.082	0.066	0.029	0.042
Oji Holdings	Basic Resources	0.384***	0.062	0.212***	0.061	0.049	0.036
Okamura	Household Furnishings	0.182**	0.073	0.001	0.082	0.06	0.04
Olympus	Medical Equip.	0.188**	0.074	0.057	0.103	0.035	0.046
Oracle	Software	-0.061	0.062	-0.048	0.062	0.002	0.035
Oreintal Land	Consumer Discretionary	0.190**	0.076	0.108*	0.055	-0.02	0.028
Organo	Elec. Equip.: Controllers	0.219***	0.073	0.076	0.076	0.079*	0.044
Oriental Land	Recreational Services	0.190**	0.076	0.108**	0.055	-0.02	0.028
Osaka Steel	Iron & Steel	0.236***	0.074	0.079	0.09	0.057	0.037
Otsuka Holdings	Pharmaceuticals	0.346***	0.129	0.164*	0.093	-0.013	0.04
Paltac	Personal Products	0.346***	0.129	0.164*	0.093	-0.013	0.04
Panasonic	Consumer Discretionary	0.189***	0.064	0.055	0.091	0.052	0.039
Rakuten	Consumer Digital Services	0.160**	0.079	0.004	0.086	0.042	0.054
Resort Trust	Hotels & Motels	0.203***	0.073	0.081	0.064	0.052	0.037
Rinnai	Household Appliances	0.146**	0.067	0.093*	0.055	0.051	0.032
Rohm	Semiconductors	0.014	0.088	-0.148**	0.072	-0.037	0.051
RoundOne	Recreational Services	0.115	0.113	0.016	0.125	0.114*	0.065
Sakata Seed	Farming & Fishing	0.198***	0.066	-0.001	0.061	0.047	0.039
Sangetsu	Household Furnishings	0.165***	0.052	0.019	0.042	0.023	0.026
Sankyo	Travel & Leisure	-0.019	0.05	-0.149***	0.036	0.048**	0.024
Sankyu	Trucking	-0.042	0.052	-0.109**	0.05	0.051	0.037
Sanrio	Toys	-0.109	0.071	-0.21***	0.054	0.086*	0.048
Santec Holdings	Elec. Equip.: Other	0.404***	0.127	0.297***	0.095	-0.004	0.076
Sapporo Holdings	Beverages	0.208***	0.052	-0.012	0.074	0.006	0.035
Secom	Industrial Support Services	0.130***	0.04	0.024	0.053	-0.007	0.026
Seiko	Luxury Items	0.164***	0.056	0.033	0.068	0.077**	0.037
Seino	Delivery Services	0.207***	0.047	0.075	0.048	0.05*	0.03
Sekiguchi	Home Construction	0.140***	0.044	-0.015	0.047	0.025	0.027
Seven&i holdings	Consumer Staples	0.211***	0.069	0.075	0.069	0.007	0.026
Shimamura	Apparel Retail	0.205***	0.069	0.147***	0.054	-0.024	0.04
Shimano	Recreational Products	0.092	0.082	-0.041	0.096	0.068*	0.035
Shimizu	Construction	0.156***	0.049	0.029	0.06	0.076**	0.032
Shinetsu Chemicals	Basic Materials	0.188***	0.061	0.04	0.078	0.016	0.035
Shinseido	Cosmetics	0.210***	0.065	0.037	0.064	0.017	0.04
Shionogi	Pharmaceuticals	0.144**	0.062	-0.009	0.063	0.007	0.036
SMC	Machinery: Industrial	0.211***	0.065	0.145**	0.057	-0.024	0.034
Sompo	Insurance	0.084	0.099	-0.03	0.088	0.067	0.046
Sony	Consumer Electronics	0.180***	0.061	0.059	0.053	0.035	0.033

Sotetsu	Travel and Tourism	0.056	0.068	-0.046	0.036	0.005	0.024
Sumitomo Bakelite	Plastics	0.198	0.123	0.017	0.125	0.061	0.044
Sumitomo Chemical	Basic Materials	0.297***	0.061	0.056	0.079	0.064*	0.035
Sumitomo Electric Industry	Auto Parts	0.353***	0.055	0.148*	0.079	0.056*	0.032
Sumitomo Forest	Home Construction	0.233***	0.07	0.08	0.06	0.062	0.039
Sumitomo Metal&Mining	Industrial Metals & Mines	0.150*	0.09	0.078	0.089	0.056	0.05
Sumitomo Mitsubishi Financial Group	Banks	0.263***	0.059	0.113*	0.067	0.078***	0.029
SUMITOMO OSAKA CEMENT	Cement	0.246***	0.046	0.11**	0.046	-0.009	0.03
Sumitomo Realty & Development	Real Estate	0.092	0.082	-0.041	0.096	0.068*	0.035
Suzuki	Automobiles	0.109	0.088	-0.009	0.091	0.006	0.038
T&D Holdings	Insurance	0.513***	0.081	0.373***	0.08	0.149***	0.044
Taiheiyo Cement	Cement	0.170*	0.101	0	0.105	0.057	0.041
Taisei	Construction	0.187***	0.055	0.048	0.059	0.074**	0.033
Takeda	Health Care	0.241***	0.064	0.069	0.077	0.012	0.034
TDK	Electrical & Electronic Equipment	0.214***	0.093	0.097	0.106	0.064	0.042
Terumo	Medical Equip.	0.287***	0.071	0.135*	0.069	-0.002	0.036
Tokio Marine Holdings	Financials	0.197***	0.052	0.045	0.054	0.059**	0.029
Toppan Holdings	Industrial Support Services	0.211***	0.058	0.014	0.067	0.039	0.034
Toray Industries	Chemicals	0.234***	0.082	0.035	0.106	0.037	0.04
Toyo Tire	Tires	0.017	0.099	-0.23***	0.084	0.049	0.048
Toyota Industries	Auto Parts	0.263***	0.05	0.13**	0.061	0.037	0.029
Toyota Motors	Automobiles	0.229***	0.043	0.112**	0.047	0.006	0.021
Trend Micro	Software	-0.151	0.094	-0.16**	0.074	0.058	0.064
Tsuruha	Drug Retailers	0.117*	0.063	0.002	0.044	0.042	0.035
UACJ	Aluminum	0.270***	0.096	0.151	0.117	0.08	0.049
Unicharm	Drug/Grocery	0.171**	0.083	0.016	0.057	-0.032	0.038
Wakitech	Machinery: Construction	0.182***	0.063	0.139**	0.054	-0.011	0.034
West Japan Railroads	Railroads	0.171**	0.073	-0.015	0.046	0.058*	0.03
Yakult	Food Producers	0.190**	0.085	0.151**	0.064	0.029	0.032
Yamabiko	Machinery	0.298***	0.08	0.064	0.079	0.031	0.051
Yamaha	Recreational Products	0.092	0.082	-0.041	0.096	0.068*	0.035
Yamato	Delivery Services	0.052	0.077	-0.005	0.097	0.107**	0.045
Yamato Kogyo	Iron & Steel	0.214***	0.081	0.078	0.096	0.029	0.034
Yokogawa Electric	Elec. Equip.: Gauges	0.139	0.155	-0.028	0.143	0.039	0.057
Yokohama Rubber	Tires	-0.02	0.082	-0.204***	0.058	0.025	0.045
Zensho	Restaurants & Bars	0.064	0.064	-0.058	0.045	0.051	0.033

Zorirushi	Household Appliances	0.298***	0.067	0.124**	0.061	0.029	0.046
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Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 27 April 2017 to 20 August 2021.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.

Table A5. The Exposure of Japanese Firms to the Return on the World Stock Market, Dubai Crude Oil Prices, and the Yen/Dollar Exchange Rate from 21 August 2021 to 31 December 2025.

(1)	(2)	Macroeconomic Variable					
		(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Return on World Stock Market	S.E.	Dubai Crude Oil Price	S.E.	Yen/USD Exchange Rate	S.E.
ABC-Mart	Apparel Retail	0.192***	0.062	-0.015	0.022	0.173**	0.067
Acom	Consumer Lending	0.341***	0.071	0.009	0.021	0.493***	0.078
Aeon	Consumer Staples	0.158***	0.061	0.015	0.021	0.156**	0.069
Aiful	Consumer Lending	0.443***	0.089	0.027	0.026	0.544***	0.081
Aiichi Steel	Iron & Steel	0.574***	0.094	0.024	0.026	0.492***	0.118
Ajinomoto	Food Producers	0.258***	0.062	0.003	0.026	0.312***	0.088
Amana	Machinery: Specialized	0.513***	0.073	0.015	0.02	0.631***	0.096
Amano	Elec. Equip.: Controllers	0.313***	0.062	0.017	0.02	0.275***	0.073
ANA	Airlines	0.264***	0.06	0.012	0.026	0.250***	0.062
As One	Medical Equip.	0.464***	0.084	0.02	0.025	0.047	0.112
Asahi Group Holdings	Beverages	0.221**	0.088	-0.003	0.028	0.356***	0.065
ASAHI KASEI	Chemicals	0.352***	0.066	0.019	0.024	0.487***	0.082
Asics	Personal Goods	0.706***	0.124	0.013	0.037	0.542***	0.169
Astellas	Pharmaceuticals	0.128*	0.068	0.011	0.021	0.454***	0.078
Azbil	Elec. Equip:Gauges	0.581***	0.083	0.024	0.023	0.450***	0.093
Bandai Namco	Toys	0.453***	0.097	-0.011	0.024	-0.055	0.096
Blue Zone Holdings	Drug/Grocery	0.117***	0.038	0.002	0.015	0.115*	0.059
Bridgestone	Tires	0.504***	0.073	-0.003	0.02	0.071	0.08
Bunka Shutter	Building Materials	0.263***	0.06	0.036*	0.019	0.350***	0.077
Canon	Elec. Office Equip	0.325***	0.066	0	0.019	0.768***	0.08
Capcom	Electronic Entertainment	0.510***	0.089	-0.03	0.027	0.241***	0.104
Casio	Consumer Electronics	0.209**	0.082	0.039*	0.02	0.308***	0.093
Central Japan Railway	Industrial Transport	0.173***	0.061	0.021	0.018	0.276***	0.071
Chubu Electric Power	Electricity	0.091	0.062	0.032	0.02	0.280***	0.076
Chugai Pharmaceuticals	Health Care	0.352***	0.08	-0.016	0.028	0.311***	0.108
Citizen Watch	Luxury Items	0.246***	0.088	0.028	0.028	0.605***	0.087
Cosmos	Oil Refining and Marketing	0.309***	0.095	0.1	0.029	0.643***	0.112
Dai Nippon	Industrial Support Services	0.114*	0.065	-0.002	0.016	0.344***	0.054
Daicel	Plastics	0.381***	0.092	0.031	0.024	0.633***	0.098
Daifuku	Machinery: Industrial	0.626***	0.104	0.046	0.028	0.403***	0.138
Daiichi Life	Insurance	0.356***	0.096	-0.012	0.024	0.608***	0.121
Daiichikoshoh	Recreational Services	0.306***	0.077	0.031	0.025	0.367***	0.076

Daiwa	Home Construction	0.229***	0.056	0.016	0.017	0.364***	0.073
Denso	Auto Parts	0.602***	0.097	0.025	0.031	0.773***	0.121
DMG Mori	Machinery:Tools	0.697***	0.1	0.016	0.032	0.655***	0.132
Dowa	Nonferrous metals	0.447***	0.081	0.083*	0.024	0.475***	0.088
East Japan Railway	Industrial Transport	0.129**	0.059	0.023	0.018	0.192***	0.059
Ebara	Machiner: Industrial	0.780***	0.116	0.014	0.029	0.654***	0.14
Eneos	Oil Refining and Marketing	0.311***	0.083	0.079***	0.02	0.596***	0.081
Fanuc	Industrial Engineering	0.626***	0.084	0.039	0.025	0.500***	0.111
Food & Life Companies	Restaurants & Bars	0.671***	0.105	-0.044	0.037	0.265*	0.136
Fujifilm	Elec. Office Equip	0.518***	0.071	0.007	0.021	0.485***	0.126
Fujijura	Electrical & Electronic Equipment	0.947***	0.148	-0.004	0.048	1.262***	0.172
Fujita Kanko	Hotels & Motels	0.348***	0.116	0.04	0.036	0.402***	0.138
Fukuyama Transporting	Trucking	0.354***	0.065	-0.006	0.025	0.058	0.09
Glory	Machinery: Specialized	0.397***	0.081	0.009	0.02	0.431***	0.082
GMO Payment Gateway	Industrial Support Services	0.639***	0.109	0.066*	0.034	-0.121	0.14
GNI Group	Biotechnology	0.689***	0.161	0.066	0.055	0.25	0.184
Goldwin	Personal Goods	0.363***	0.078	0.040*	0.024	0.211***	0.104
Hamamatsu Photonics	Semiconductors	0.774***	0.129	0.004	0.028	0.195**	0.093
Happinet	Toys	0.346***	0.128	-0.007	0.025	0.069	0.111
Heiwa	Travel and Tourism	0.137**	0.068	-0.015	0.016	0.03	0.059
HIS	Travel and Tourism	0.505***	0.101	0.008	0.036	-0.149	0.092
Hitachi	Diversified Industrial	0.615***	0.096	0.006	0.038	0.683***	0.119
Hitachi Construction Machinery	Machinery: Construction	0.402***	0.079	0.060**	0.03	0.747***	0.119
Hochiki	Elec. Equip:Controllers	0.368***	0.068	0.022	0.021	0.552***	0.089
Hokuetsu	Industrial Materials	0.345***	0.085	0.055*	0.03	0.296***	0.11
Hokuriku	Electricity	0.021	0.071	0.068**	0.029	0.233***	0.085
Honda	Automobiles	0.479***	0.082	0.013	0.024	0.885***	0.112
Horiba	Elec. Equip:Gauges	0.640***	0.098	0.019	0.026	0.502***	0.106
Hoshizaki	Machiner: Industrial	0.338***	0.065	0	0.02	0.322***	0.076
Hoya	Health Care	0.581***	0.083	0.026	0.028	0.371***	0.124
Ibiden	Electronic Components	0.896***	0.123	0.007	0.044	0.671***	0.189
Idemitsu	Oil Refining and Marketing	0.209**	0.087	0.085***	0.02	0.559***	0.086
Inabata	Plastics	0.373***	0.064	0.011	0.02	0.476***	0.067
Inpex	Oil, Gas, Coal	0.24**	0.103	0.157***	0.025	0.688***	0.108

Itochu	Diversified Industrial	0.418***	0.08	0.028	0.019	0.537***	0.094
Itochu	Industrial Goods & Services	0.418***	0.08	0.028	0.019	0.537***	0.094
Itoka	Household Furnishings	0.454***	0.094	0.025	0.032	0.474***	0.141
JAL	Airlines	0.349***	0.076	0.022	0.033	0.302***	0.071
Japan Elevators Holding Service	Industrial Suppliers	0.542***	0.115	0.039	0.031	0.224**	0.109
Japan Oil Exploration	Oil: Crude Production	0.251***	0.093	0.115***	0.029	0.692***	0.105
Japan Pulp and Paper	Industrial Materials	0.342***	0.072	0.029	0.018	0.384***	0.088
Japan Tobacco	Consumer Staples	0.181***	0.063	-0.001	0.019	0.540***	0.076
JVCKENWOOD	Consumer Electronics	0.462***	0.113	-0.018	0.035	0.399**	0.16
Kajima	Construction	0.292***	0.075	0.048**	0.02	0.501***	0.075
Kamei	Oil, Gas, Coal	0.468***	0.075	0.042**	0.021	0.525***	0.091
Kansai Electric	Electricity	0.166**	0.066	0.045**	0.021	0.315***	0.103
Kao	Drug/Grocery	0.194***	0.053	0.027*	0.015	0.147**	0.073
Kawasaki Kisen	Marine Transport	0.560***	0.143	0.057	0.038	0.476***	0.152
Keio	Travel & Leisure	0.204***	0.075	0.008	0.02	-0.046	0.081
Keisei Electric	Railroads	0.331***	0.076	0.022	0.027	0.334***	0.088
Keyence	Electrical & Electronic Equipment	0.599***	0.075	-0.013	0.026	0.440***	0.111
Kikkoman	Food Products	0.365***	0.086	0.047*	0.028	0.498***	0.096
Kirin	Beverages	0.063	0.051	0.012	0.016	0.265***	0.045
Kobayashi Pharmaceuticals	Personal Products	0.174***	0.053	0.014	0.018	-0.008	0.07
Kobe Steel	Basic Resources	0.364***	0.09	0.049**	0.022	0.451***	0.11
Kokuyo	Industrial Suppliers	0.296***	0.059	0.02	0.017	0.371***	0.076
Komatsu	Industrial Engineering	0.467***	0.072	0.058**	0.027	0.742***	0.096
Konami	Electronic Entertainment	0.384***	0.081	-0.004	0.028	0.628***	0.111
Konica Minolta	Elec. Office Equip	0.321***	0.106	0.02	0.026	0.602***	0.111
Kose	Cosmetics	0.410***	0.092	0.013	0.028	0.184*	0.097
Kotobuki Spirits	Food Products	0.435***	0.099	0.01	0.03	0.331***	0.112
Kubota	Machinery: Agricultural	0.447***	0.099	0.054*	0.027	0.513***	0.104
Kumiai** Chemical	Fertilizer	0.162***	0.081	0.027	0.029	0.460***	0.09
Kurita Water	Elec. Equip:Pollution Control	0.640***	0.086	0.064**	0.03	0.474***	0.095
Kusuri no aoki	Drug Retailers	0.216**	0.089	0.047	0.029	0.014	0.073
Kyocera	Electronic Components	0.384***	0.068	0.037*	0.021	0.525***	0.079
LY	Consumer Digital Services	0.418***	0.091	0.01	0.03	-0.04	0.093
MacDonalds	Restaurants & Bars	0.023	0.029	-0.024**	0.011	0.018	0.039
Makita	Machinery:Tools	0.663***	0.108	0.023	0.028	0.416***	0.159

Marubeni	Industrial Suppliers	0.495***	0.089	0.043*	0.024	0.707***	0.109
Matsuda Sangyo	Nonferrous metals	0.459***	0.077	0.052**	0.024	0.23**	0.107
Matsukiyohara	Drug Retailers	0.225***	0.08	0.02	0.025	0.269***	0.079
Max	Machinery:Tools	0.347***	0.067	-0.008	0.026	0.373***	0.077
Meiji Holdings	Food Producers	-0.008	0.047	0.023	0.016	0.008	0.056
Mitani Sekisan	Cement	0.422***	0.086	0.067**	0.031	0.305**	0.13
Mitsubishi	Diversified Industrial	0.393***	0.071	0.045**	0.02	0.694***	0.096
Mitsubishi Estate	Real Estate	0.286***	0.065	0.038*	0.02	0.502***	0.097
Mitsubishi HC	Consumer Lending	0.304***	0.059	0.015	0.018	0.483***	0.062
Mitsubishi Heavy	Industrial Engineering	0.465***	0.1	0.083**	0.034	0.825***	0.121
Mitsubishi Logistech	Machinery: Construction	0.598***	0.099	0.051	0.032	0.550***	0.135
MitsubishiUFJ	Banks	0.469***	0.086	0	0.026	0.566***	0.106
Mitsui	Industrial Goods & Services	0.437***	0.092	0.066***	0.023	0.698***	0.119
Mitsui Fudosan	Real Estate	0.282***	0.065	0.036	0.023	0.676***	0.093
Mitsui Kinzoku	Nonferrous metals	0.536***	0.096	0.021	0.03	0.578***	0.104
Mitsui Matsushima	Oil, Gas, Coal	0.298**	0.125	0.06	0.041	0.431***	0.153
Mitsui OSK	Marine Transport	0.435***	0.105	0.096***	0.031	0.298***	0.103
Mizuho Financial Group	Banks	0.420***	0.089	-0.009	0.026	0.567***	0.101
Mizuno	Recreational Products	0.494***	0.097	0.002	0.025	0.458***	0.118
Modec	Oil Equipmnr and Services	0.637***	0.138	0.06	0.039	1.035***	0.149
MS&AD Insurance Group	Financials	0.344***	0.084	-0.011	0.026	0.625***	0.098
Murata	Electronic Components	0.606***	0.087	0.013	0.023	0.600***	0.142
Nexon	Electronic Entertainment	0.611***	0.094	0.005	0.029	0.280**	0.123
Nichirei	Food Products	0.047	0.056	0.009	0.016	0.004	0.081
Nikkon Holdings	Trucking	0.278***	0.054	-0.015	0.019	0.058	0.064
Nintendo	Consumer Discretionary	0.409***	0.082	-0.005	0.022	0.493***	0.099
Nippon Light Metal Holdings	Aluminum	0.339***	0.068	0.041	0.02	0.369***	0.078
Nippon Sanso Holdings	Chemicals	0.500***	0.089	0.021	0.027	0.478***	0.102
Nippon Steel	Basic Resources	0.379***	0.066	0.047	0.024	0.404***	0.09
Nippon Yusen	Industrial Transport	0.504***	0.097	0.083	0.029	0.357***	0.114
Nissui	Farming & Fishing	0.147**	0.068	0	0.021	0.303***	0.072
Nitto Boseki	Industrial Materials	0.888***	0.117	-0.013	0.038	0.898***	0.162
Nitto Denko	Basic Materials	0.586***	0.092	0.023	0.024	0.792***	0.132
Noevir	Cosmetics	0.141***	0.046	0.003	0.014	0.169***	0.062
Noritz	Household Appliances	0.308***	0.053	0.018	0.021	0.294***	0.056

OBIC Business Consultants	Software	0.514***	0.077	-0.043	0.026	0.031	0.111
Oji Holdings	Basic Resources	0.180***	0.053	0.052	0.019	0.280***	0.066
Okamura	Household Furnishings	0.390***	0.087	0.007	0.022	0.427***	0.114
Olympus	Medical Equip	0.444***	0.079	0.033	0.03	0.532***	0.101
Oracle	Software	0.435***	0.076	-0.033	0.023	-0.023	0.081
Oreintal Land	Consumer Discretionary	0.280***	0.076	0.012	0.022	0.214*	0.113
Organo	Elec. Equip:Controllers	0.592***	0.104	0.007	0.032	0.521***	0.139
Oriental Land	Recreational Services	0.280***	0.076	0.012	0.022	0.214*	0.113
Osaka Steel	Iron & Steel	0.458***	0.092	0.028	0.029	0.301**	0.118
Otsuka Holdings	Pharmaceuticals	0.135**	0.063	0.004	0.018	0.527***	0.085
Paltac	Personal Products	0.279***	0.058	0.011	0.021	0.326***	0.075
Panasonic	Consumer Discretionary	0.486***	0.085	0.031	0.026	0.584***	0.113
Rakuten	Consumer Digital Services	0.507***	0.104	0.011	0.03	0.133	0.146
Resort Trust	Hotels & Motels	0.362***	0.074	0.003	0.022	0.402***	0.076
Rinnai	Household Appliances	0.338***	0.066	0.029	0.019	0.247***	0.084
Rohm	Semiconductors	0.954***	0.092	-0.004	0.026	0.242**	0.105
RoundOne	Recreational Services	0.433***	0.112	0.037	0.041	0.664***	0.136
Sakata Seed	Farming & Fishing	0.140***	0.054	0.012	0.017	0.440***	0.084
Sangetsu	Household Furnishings	0.150***	0.053	0.015	0.016	0.322***	0.064
Sankyo	Travel & Leisure	0.194**	0.095	-0.019	0.025	0.019	0.097
Sankyu	Trucking	0.369***	0.065	0.03	0.025	0.094	0.084
Sanrio	Toys	0.480***	0.129	-0.002	0.037	0.049	0.148
Santec Holdings	Elec. Equip:Other	0.618***	0.149	-0.013	0.045	0.982***	0.184
Sapporo Holdings	Beverages	0.045	0.069	-0.025	0.025	0.347***	0.08
Secom	Industrial Support Services	0.114*	0.065	-0.002	0.016	0.344***	0.054
Seiko	Luxury Items	0.509***	0.105	0.01	0.032	0.695***	0.096
Seino	Delivery Services	0.218***	0.057	0.019	0.02	0.279***	0.061
Sekiguchi	Home Construction	0.333***	0.068	0.013	0.019	0.392***	0.077
Seven&i holdings	Consumer Staples	0.354***	0.083	0.009	0.023	0.306**	0.137
Shimamura	Apparel Retail	0.216***	0.056	-0.024	0.017	0.208***	0.075
Shimano	Recreational Products	0.442***	0.08	0.029	0.027	0.602***	0.114
Shimizu	Construction	0.219***	0.061	0.033	0.025	0.479***	0.085
Shinetsu Chemicals	Basic Materials	0.576***	0.088	0.028	0.026	0.24**	0.121
Shinseido	Cosmetics	0.484***	0.087	0.007	0.028	0.092	0.142
Shionogi	Pharmaceuticals	0.179**	0.08	0.048	0.022	0.284***	0.084
SMC	Machiner: Industrial	0.558***	0.088	0.026	0.027	0.476***	0.124
Sompo	Insurance	0.324***	0.088	0.008	0.026	0.591***	0.097
Sony	Consumer Electronics	0.601***	0.085	0.023	0.026	0.523***	0.124

Sotetsu	Travel and Tourism	0.137***	0.053	0.023	0.019	-0.035	0.063
Sumitomo Bakelite	Plastics	0.551***	0.088	0.044*	0.023	0.672***	0.105
Sumitomo Chemical	Basic Materials	0.358***	0.07	0.04	0.027	0.446***	0.102
Sumitomo Electric Industry	Auto Parts	0.566***	0.091	0.012	0.031	0.859***	0.109
Sumitomo Forest	Home Construction	0.543***	0.109	0.024	0.026	0.189	0.132
Sumitomo Metal&Mining	Industrial Metals&Mines	0.480***	0.095	0.109***	0.026	0.207*	0.113
Sumitomo Mitsubishi Financial Group	Banks	0.431***	0.082	-0.001	0.024	0.525***	0.107
SUMITOMO OSAKA CEMENT	Cement	0.248***	0.08	-0.033	0.03	0.314***	0.085
Sumitomo Realty & Development	Real Estate	0.442***	0.08	0.029	0.027	0.602***	0.114
Suzuki	Automobiles	0.514***	0.086	0.034	0.031	0.823***	0.101
T&D Holdings	Insurance	0.345***	0.1	0.005	0.029	0.575***	0.131
Taiheiyo Cement	Cement	0.343***	0.081	0.011	0.027	0.543***	0.083
Taisei	Construction	0.322***	0.067	0.044	0.022	0.542***	0.096
Takeda	Health Care	0.168***	0.049	0.015	0.014	0.383***	0.066
TDK	Electrical & Electronic Equipment	0.753***	0.106	0.018	0.034	0.690***	0.145
Terumo	Medical Equip	0.457***	0.095	0.031	0.024	0.566***	0.087
Tokio Marine Holdings	Financials	0.401***	0.105	-0.021	0.028	0.686***	0.121
Toppan Holdings	Industrial Support Services	0.349***	0.072	0.033	0.022	0.593***	0.091
Toray Industries	Chemicals	0.353***	0.086	0.019	0.023	0.434***	0.09
Toyo Tire	Tires	0.588***	0.09	-0.02	0.028	0.210*	0.109
Toyota Industries	Auto Parts	0.631***	0.086	0.014	0.03	0.811***	0.131
Toyota Motors	Automobiles	0.555***	0.076	-0.008	0.026	0.897***	0.106
Trend Micro	Software	0.529***	0.074	0.008	0.022	0.142	0.101
Tsuruha	Drug Retailers	0.168**	0.075	0.013	0.027	0.044	0.079
UACJ	Aluminum	0.485***	0.089	0.063	0.031	0.496***	0.119
Unicharm	Drug/Grocery	0.212***	0.061	-0.001	0.021	-0.072	0.063
Wakitech	Machinery: Construction	0.308***	0.059	-0.002	0.017	0.424***	0.072
West Japan Railroads	Railroads	0.148**	0.063	0.034	0.021	0.301***	0.064
Yakult	Food Producers	-0.028	0.056	0.026	0.017	0.115*	0.065
Yamabiko	Machinery	0.495***	0.127	0	0.029	0.649***	0.121
Yamaha	Recreational Products	0.442***	0.08	0.029	0.027	0.602***	0.114
Yamato	Delivery Services	0.213***	0.057	0.015	0.018	0.149**	0.071
Yamato Kogyo	Iron & Steel	0.420***	0.075	0.022	0.022	0.492***	0.098
Yokogawa Electric	Elec. Equip:Gauges	0.402***	0.067	0.045	0.031	0.762***	0.093
Yokohama Rubber	Tires	0.661***	0.1	-0.046	0.025	0.225*	0.119
Zensho	Restaurants & Bars	0.250***	0.064	0.037	0.024	-0.132	0.096

Zorirushi	Household Appliances	0.341***	0.068	0.024	0.023	0.247***	0.095
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Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 21 August 2021 to 31 December 2025.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.

Table A6. The Exposure of Japanese Firms to the Breakeven Inflation Rate, the Interest Rate on Inflation-linked Bonds, and the Shadow Monetary Policy Rate from 21 August 2021 to 31 December 2025.

(1)	(2)	Macroeconomic Variable					
		(3)	(4)	(5)	(6)	(7)	(8)
Firm	Sector	Breakeven Inflation Rate	S.E.	Interest Rate on Inflation-Linked Bond	S.E.	Shadow Monetary Policy Rate	S.E.
ABC-Mart	Apparel Retail	0.093**	0.045	-0.003	0.024	-0.004	0.027
Acom	Consumer Lending	0.111**	0.047	0.018	0.026	0.017	0.028
Aeon	Consumer Staples	0.013	0.028	-0.028	0.023	-0.077***	0.027
Aiful	Consumer Lending	0.166***	0.058	0.048	0.031	-0.001	0.032
Aiichi Steel	Iron & Steel	0.109	0.07	0	0.042	-0.023	0.034
Ajinomoto	Food Producers	0.003	0.035	0.015	0.029	-0.047	0.033
Amana	Machinery: Specialized	0.150**	0.074	0.015	0.033	-0.062**	0.03
Amano	Elec. Equip:Controllers	0.084**	0.035	0.006	0.029	-0.029	0.026
ANA	Airlines	0.026	0.028	-0.007	0.021	0	0.026
As One	Medical Equip	0.051	0.045	-0.016	0.034	-0.09**	0.041
Asahi Group Holdings	Beverages	0.060*	0.036	0	0.026	-0.021	0.028
ASAHI KASEI	Chemicals	0.082**	0.04	0.044	0.027	0.002	0.025
Asics	Personal Goods	0.14*	0.081	0.077	0.048	-0.076	0.05
Astellas	Pharmaceuticals	0.046*	0.026	0.007	0.025	-0.026	0.026
Azbil	Elec. Equip:Gauges	0.111	0.074	-0.035	0.04	-0.123***	0.031
Bandai Namco	Toys	-0.023	0.029	0.036	0.041	-0.066**	0.031
Blue Zone Holdings	Drug/Grocery	0.014	0.016	0.03	0.019	-0.04**	0.017
Bridgestone	Tires	-0.06**	0.029	0.027	0.036	-0.004	0.026
Bunka Shutter	Building Materials	0.084*	0.047	0.021	0.027	-0.03	0.024
Canon	Elec. Office Equip	0.063*	0.037	0.018	0.031	-0.021	0.027
Capcom	Electronic Entertainment	0.111	0.08	-0.046	0.039	-0.071*	0.04
Casio	Consumer Electronics	0.081**	0.037	0.03	0.028	-0.03	0.026
Central Japan Railway	Industrial Transport	0.043	0.038	-0.037	0.026	-0.018	0.024
Chubu Electric Power	Electricity	0.063*	0.038	0.001	0.027	0.002	0.028
Chugai Pharmaceuticals	Health Care	0.021	0.032	-0.042	0.034	-0.086**	0.034
Citizen Watch	Luxury Items	0.148**	0.058	0.029	0.034	-0.017	0.033
Cosmos	Oil Refining and Marketing	0.191***	0.05	0.098*	0.04	-0.074**	0.037
Dai Nippon	Industrial Support Services	0.034	0.03	-0.022	0.022	-0.05**	0.023
Daicel	Plastics	0.12**	0.059	0.024	0.034	0.008	0.03
Daifuku	Machiner: Industrial	0.167**	0.075	-0.008	0.038	-0.064	0.048
Daiichi Life	Insurance	0.281***	0.058	0.224***	0.038	0.076*	0.04

Daiichikosho	Recreational Services	0.067	0.043	-0.01	0.027	-0.009	0.036
Daiwa	Home Construction	0.067*	0.037	-0.017	0.026	-0.039*	0.021
Denso	Auto Parts	0.147**	0.059	0.038	0.033	-0.068**	0.034
DMG Mori	Machinery:Tools	0.213***	0.081	0.100**	0.048	-0.038	0.046
Dowa	Nonferrous metals	0.129***	0.05	0.019	0.032	-0.04	0.036
East Japan Railway	Industrial Transport	0.026	0.037	-0.034	0.023	-0.038	0.025
Ebara	Machiner: Industrial	0.169*	0.087	0.011	0.047	-0.029	0.036
Eneos	Oil Refining and Marketing	0.200***	0.056	0.065*	0.037	-0.012	0.028
Fanuc	Industrial Engineering	0.112**	0.052	0.064	0.039	-0.045	0.037
Food & Life Companies	Restaurants & Bars	-0.038	0.041	0.061	0.05	-0.059	0.056
Fujifilm	Elec. Office Equip	0.104*	0.062	-0.016	0.03	-0.057*	0.029
Fujijura	Electrical & Electronic Equipment	0.159*	0.094	0.06	0.074	-0.004	0.054
Fujita Kanko	Hotels & Motels	0.146**	0.073	0.048	0.046	-0.005	0.039
Fukuyama Transporting	Trucking	0.014	0.03	0.051*	0.029	-0.05	0.031
Glory	Machinery: Specialized	0.092**	0.041	0.037	0.036	-0.006	0.029
GMO Payment Gateway	Industrial Support Services	-0.009	0.057	-0.065	0.043	-0.195***	0.048
GNI Group	Biotechnology	0.048	0.108	-0.127	0.089	-0.085	0.056
Goldwin	Personal Goods	0.07	0.059	0.003	0.035	-0.036	0.036
Hamamatsu Photonics	Semiconductors	-0.011	0.038	0.03	0.041	-0.046	0.033
Happinet	Toys	-0.085**	0.039	-0.022	0.045	0.03	0.034
Heiwa	Travel and Tourism	-0.003	0.016	0.009	0.024	0.009	0.022
HIS	Travel and Tourism	0.01	0.027	0.073**	0.035	-0.013	0.04
Hitachi	Diversified Industrial	0.220***	0.074	0.078	0.051	-0.009	0.039
Hitachi Construction Machinery	Machinery: Construction	0.156***	0.051	0.089**	0.043	-0.043	0.041
Hochiki	Elec. Equip:Controllers	0.112***	0.035	0.061	0.037	-0.026	0.024
Hokuetsu	Industrial Materials	0.034	0.041	0.001	0.042	0.035	0.04
Hokuriku	Electricity	0.073**	0.029	0.007	0.03	-0.025	0.03
Honda	Automobiles	0.135**	0.063	0.024	0.038	-0.008	0.029
Horiba	Elec. Equip:Gauges	0.163**	0.076	0.041	0.042	-0.042	0.038
Hoshizaki	Machiner: Industrial	0.098**	0.046	0.056**	0.028	-0.058*	0.032
Hoya	Health Care	0.075	0.056	-0.015	0.032	-0.051	0.039
Ibiden	Electronic Components	0.145*	0.085	0.032	0.064	-0.123**	0.053
Idemitsu	Oil Refining and Marketing	0.145***	0.049	0.029	0.045	-0.049	0.041

Inabata	Plastics	0.049	0.04	-0.007	0.037	0.055	0.073
Inpex	Oil, Gas, Coal	0.169***	0.055	0.026	0.035	-0.026	0.041
Itochu	Diversified Industrial	0.113**	0.053	0.011	0.029	-0.037	0.027
Itochu	Industrial Goods & Services	0.113**	0.053	0.011	0.029	-0.037	0.027
Itoka	Household Furnishings	0.097*	0.056	0.076*	0.043	0	0.038
JAL	Airlines	0.058	0.04	0.016	0.024	0.028	0.032
Japan Elevators Holding Service	Industrial Suppliers	0.067	0.048	-0.005	0.036	-0.152***	0.044
Japan Oil Exploration	Oil: Crude Production	0.171***	0.042	0.062*	0.037	-0.035	0.042
Japan Pulp and Paper	Industrial Materials	0.143**	0.06	0.021	0.032	-0.026	0.031
Japan Tobacco	Consumer Staples	0.101*	0.053	0.008	0.025	-0.03	0.019
JVCKENWOOD	Consumer Electronics	0.164**	0.065	0.066	0.07	-0.068	0.061
Kajima	Construction	0.126**	0.063	0.012	0.026	-0.041	0.032
Kamei	Oil, Gas, Coal	0.159***	0.057	0.08**7	0.034	-0.03	0.029
Kansai Electric	Electricity	0.123**	0.055	-0.004	0.037	0.028	0.031
Kao	Drug/Grocery	0.037	0.029	-0.023	0.021	-0.045*	0.026
Kawasaki Kisen	Marine Transport	0.202**	0.087	0.033	0.05	-0.069	0.064
Keio	Travel & Leisure	0.021	0.026	0.051*	0.03	-0.019	0.029
Keisei Electric	Railroads	0.023	0.038	-0.036	0.034	0.002	0.034
Keyence	Electrical & Electronic Equipment	0.143**	0.065	0.029	0.035	-0.159***	0.036
Kikkoman	Food Products	0.099	0.082	-0.055	0.035	-0.072**	0.033
Kirin	Beverages	0.018	0.022	-0.006	0.018	0.004	0.02
Kobayashi Pharmaceuticals	Personal Products	0.058**	0.029	0.035	0.027	-0.01	0.039
Kobe Steel	Basic Resources	0.134**	0.057	0.057*	0.033	-0.018	0.038
Kokuyo	Industrial Suppliers	0.107***	0.038	0.04	0.025	-0.012	0.029
Komatsu	Industrial Engineering	0.126***	0.041	0.066*	0.036	-0.041	0.032
Konami	Electronic Entertainment	0.003	0.05	-0.055	0.04	-0.031	0.044
Konica Minolta	Elec. Office Equip	0.133**	0.056	0.145***	0.049	-0.006	0.041
Kose	Cosmetics	0.082	0.052	-0.007	0.041	-0.069	0.051
Kotobuki Spirits	Food Products	0.057	0.078	-0.035	0.037	0.023	0.057
Kubota	Machinery: Agricultural	0.117**	0.052	0.064	0.042	-0.091**	0.04
Kumiai Chemical	Fertilizer	0.104*	0.056	-0.001	0.038	0.021	0.031
Kurita Water	Elec. Equip:Pollution Control	0.172***	0.063	0.049	0.05	-0.082**	0.033
Kusuri no aoki	Drug Retailers	0.059	0.04	0.017	0.031	-0.03	0.037
Kyocera	Electronic Components	0.085**	0.041	0.01	0.025	-0.04*	0.023
LY	Consumer Digital Services	0.08*	0.045	0.064**	0.031	-0.111***	0.038
MacDonalds	Restaurants & Bars	-0.001	0.014	0.017	0.017	-0.024	0.014

Makita	Machinery:Tools	0.114	0.08	-0.006	0.052	-0.029	0.044
Marubeni	Industrial Suppliers	0.167***	0.06	0.039	0.036	-0.044	0.036
Matsuda Sangyo	Nonferrous metals	0.122**	0.053	0.028	0.04	-0.029	0.036
Matsukiyohara	Drug Retailers	0.023	0.053	-0.02	0.031	-0.048	0.035
Max	Machinery:Tools	0.085*	0.046	0.027	0.03	-0.07***	0.032
Meiji Holdings	Food Producers	0.023	0.021	-0.001	0.021	-0.033*	0.018
Mitani Sekisan	Cement	0.117**	0.049	0.066	0.054	-0.067	0.043
Mitsubishi	Diversified Industrial	0.132**	0.051	0.043	0.028	-0.034	0.032
Mitsubishi Estate	Real Estate	0.018	0.046	-0.065*	0.036	-0.018	0.03
Mitsubishi HC	Consumer Lending	0.121**	0.049	0.033	0.024	-0.006	0.024
Mitsubishi Heavy	Industrial Engineering	0.21***	0.078	0.046	0.054	-0.017	0.045
Mitsubishi Logistech	Machinery: Construction	0.175**	0.081	0.033	0.044	-0.098**	0.047
MitsubishiUFJ	Banks	0.265***	0.064	0.205***	0.037	0.126***	0.037
Mitsui	Industrial Goods & Services	0.162**	0.069	0.035	0.033	-0.027	0.034
Mitsui Fudosan	Real Estate	0.036	0.056	-0.083**	0.038	-0.048	0.036
Mitsui Kinzoku	Nonferrous metals	0.198***	0.068	0.093**	0.04	-0.037	0.038
Mitsui Matsushima	Oil, Gas, Coal	0.192***	0.055	0.114**	0.049	-0.083	0.063
Mitsui OSK	Marine Transport	0.167***	0.062	0.053	0.041	-0.08*	0.045
Mizuho Financial Group	Banks	0.302***	0.068	0.223***	0.043	0.099***	0.031
Mizuno	Recreational Products	0.151**	0.061	0.056	0.045	-0.005	0.039
Modec	Oil Equipmnr and Services	0.238***	0.08	0.124***	0.046	-0.097*	0.054
MS&AD Insurance Group	Financials	0.173**	0.071	0.105***	0.039	0.031	0.032
Murata	Electronic Components	0.153***	0.055	0.052	0.041	-0.061*	0.032
Nexon	Electronic Entertainment	0.04	0.067	-0.051	0.052	-0.032	0.052
Nichirei	Food Products	0.03	0.031	-0.009	0.023	-0.024	0.023
Nikkon Holdings	Trucking	0.009	0.018	0.042*	0.025	-0.052**	0.024
Nintendo	Consumer Discretionary	0.106	0.066	-0.012	0.038	-0.014	0.027
Nippon Light Metal Holdings	Aluminum	0.142***	0.047	0.072**	0.031	-0.02	0.025
Nippon Sanso Holdings	Chemicals	0.122	0.079	0	0.034	-0.094***	0.035
Nippon Steel	Basic Resources	0.088**	0.042	0.042	0.032	-0.017	0.034
Nippon Yusen	Industrial Transport	0.154***	0.058	0.072*	0.04	-0.069	0.047
Nissui	Farming & Fishing	0.088**	0.044	0.005	0.024	0.029	0.025
Nitto Boseki	Industrial Materials	0.093	0.088	-0.029	0.056	0.024	0.063
Nitto Denko	Basic Materials	0.144*	0.076	0.004	0.041	-0.044	0.032
Noevir	Cosmetics	0.057**	0.026	0.021	0.019	-0.055**	0.024
Noritz	Household Appliances	0.067**	0.033	0.006	0.026	0.001	0.019

OBIC Business Consultants	Software	-0.002	0.038	0.033	0.036	-0.107***	0.039
Oji Holdings	Basic Resources	0.089**	0.034	0.047**	0.022	0.024	0.022
Okamura	Household Furnishings	0.111	0.07	-0.008	0.038	-0.002	0.028
Olympus	Medical Equip	0.079	0.052	0.033	0.043	-0.065	0.057
Oracle	Software	0.009	0.024	0.01	0.023	-0.016	0.025
Oreintal Land	Consumer Discretionary	0.04	0.051	-0.045	0.035	-0.05	0.038
Organo	Elec. Equip:Controllers	0.131*	0.069	0.032	0.055	-0.062	0.041
Oriental Land	Recreational Services	0.04	0.051	-0.045	0.035	-0.05	0.038
Osaka Steel	Iron & Steel	0.143**	0.068	0.015	0.052	0.037	0.04
Otsuka Holdings	Pharmaceuticals	0.025	0.028	-0.015	0.025	-0.059**	0.024
Paltac	Personal Products	0.07*	0.037	0	0.025	0.003	0.029
Panasonic	Consumer Discretionary	0.091*	0.049	0.028	0.038	-0.033	0.034
Rakuten	Consumer Digital Services	0.158**	0.067	0.04	0.045	-0.046	0.037
Resort Trust	Hotels & Motels	0.073*	0.042	0.004	0.027	-0.018	0.029
Rinnai	Household Appliances	0.112**	0.052	0.026	0.027	-0.06**	0.025
Rohm	Semiconductors	-0.012	0.031	0.013	0.045	-0.017	0.034
RoundOne	Recreational Services	0.197**	0.085	0.107*	0.057	-0.057	0.047
Sakata Seed	Farming & Fishing	0.083***	0.032	0.014	0.026	0.003	0.024
Sangetsu	Household Furnishings	0.072*	0.038	0.04	0.026	-0.02	0.023
Sankyo	Travel & Leisure	-0.006	0.028	-0.009	0.04	0.015	0.039
Sankyu	Trucking	-0.002	0.023	0.03	0.032	-0.059*	0.036
Sanrio	Toys	-0.031	0.042	0.091*	0.05	-0.044	0.048
Santec Holdings	Elec. Equip:Other	0.187**	0.084	0.076	0.064	-0.093	0.064
Sapporo Holdings	Beverages	0.058	0.035	0.003	0.031	-0.029	0.03
Secom	Industrial Support Services	0.034	0.03	-0.022	0.022	-0.05**	0.023
Seiko	Luxury Items	0.119	0.075	-0.023	0.045	0.023	0.035
Seino	Delivery Services	0.033	0.036	-0.004	0.022	-0.006	0.021
Sekiguchi	Home Construction	0.096	0.063	-0.005	0.028	-0.029	0.024
Seven&i holdings	Consumer Staples	0.079*	0.042	0.008	0.036	0.04	0.038
Shimamura	Apparel Retail	-0.001	0.04	-0.067***	0.025	0.021	0.024
Shimano	Recreational Products	0.064	0.069	-0.077*	0.04	-0.033	0.036
Shimizu	Construction	0.114***	0.042	0.06**	0.029	-0.043	0.026
Shinetsu Chemicals	Basic Materials	0.149**	0.064	0.03	0.046	-0.054	0.035
Shinseido	Cosmetics	0.05	0.055	0.032	0.043	-0.035	0.048
Shionogi	Pharmaceuticals	0.051	0.032	-0.011	0.025	-0.074*	0.039
SMC	Machiner: Industrial	0.102**	0.048	0.038	0.034	-0.11***	0.042
Sompo	Insurance	0.21***	0.066	0.094**	0.039	0.017	0.033
Sony	Consumer Electronics	0.09*	0.053	0.035	0.041	-0.065*	0.034

Sotetsu	Travel and Tourism	0.013	0.019	0.049*	0.025	-0.036	0.026
Sumitomo Bakelite	Plastics	0.101	0.07	0.015	0.035	-0.068*	0.035
Sumitomo Chemical	Basic Materials	0.109***	0.038	0.047	0.034	-0.003	0.032
Sumitomo Electric Industry	Auto Parts	0.212***	0.072	0.1	0.054	0	0.039
Sumitomo Forest	Home Construction	0.096	0.087	-0.045	0.042	-0.03	0.039
Sumitomo Metal&Mining	Industrial Metals&Mines	0.226***	0.062	0.085*	0.047	-0.018	0.042
Sumitomo Mitsubishi Financial Group	Banks	0.236***	0.049	0.211***	0.036	0.091***	0.034
SUMITOMO OSAKA CEMENT	Cement	0.092*	0.055	0.013	0.027	0.005	0.03
Sumitomo Realty & Development	Real Estate	0.064	0.069	-0.077*	0.04	-0.033	0.036
Suzuki	Automobiles	0.124*	0.064	-0.012	0.034	-0.01	0.038
T&D Holdings	Insurance	0.274***	0.065	0.215***	0.039	0.088**	0.044
Taiheiyo Cement	Cement	0.149**	0.071	0.043	0.03	-0.007	0.03
Taisei	Construction	0.155***	0.058	0.055*	0.029	-0.047	0.032
Takeda	Health Care	0.012	0.021	-0.017	0.019	0.002	0.024
TDK	Electrical & Electronic Equipment	0.156**	0.076	0.031	0.053	-0.06	0.044
Terumo	Medical Equip	0.089	0.059	-0.053	0.034	-0.088***	0.031
Tokio Marine Holdings	Financials	0.227***	0.084	0.082*	0.046	0.029	0.035
Toppan Holdings	Industrial Support Services	0.127**	0.056	-0.018	0.037	0.003	0.036
Toray Industries	Chemicals	0.154***	0.055	0.057*	0.034	-0.02	0.03
Toyo Tire	Tires	-0.042	0.035	0.058	0.046	-0.004	0.035
Toyota Industries	Auto Parts	0.111	0.072	-0.016	0.038	0.006	0.043
Toyota Motors	Automobiles	0.129**	0.054	0.042	0.038	-0.034	0.032
Trend Micro	Software	0.008	0.029	0.061**	0.03	-0.043	0.029
Tsuruha	Drug Retailers	0.06	0.04	-0.001	0.04	-0.06	0.04
UACJ	Aluminum	0.095**	0.046	0.053	0.036	-0.08*	0.044
Unicharm	Drug/Grocery	0.016	0.031	0.004	0.028	-0.075***	0.026
Wakitech	Machinery: Construction	0.102**	0.04	0.046	0.029	-0.043*	0.022
West Japan Railroads	Railroads	0.058	0.039	-0.02	0.024	-0.021	0.028
Yakult	Food Producers	-0.014	0.028	-0.017	0.033	-0.004	0.024
Yamabiko	Machinery	0.164**	0.075	0.053	0.048	0.035	0.049
Yamaha	Recreational Products	0.064	0.069	-0.077*	0.04	-0.033	0.036
Yamato	Delivery Services	-0.003	0.025	0.019	0.027	-0.057*	0.029
Yamato Kogyo	Iron & Steel	0.118**	0.048	0.05	0.031	-0.055*	0.033
Yokogawa Electric	Elec. Equip:Gauges	0.108**	0.049	0.007	0.035	-0.064**	0.031
Yokohama Rubber	Tires	-0.039	0.035	0.047	0.048	0.007	0.034
Zensho	Restaurants & Bars	0.026	0.028	0.09**	0.039	-0.071*	0.036

Zorirushi	Household Appliances	0.063	0.04	0.001	0.037	-0.014	0.031
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Notes: The table presents coefficients from regressions of returns on the firms listed in column (1) on 1) the return on the world stock market, 2) the change in the log of the spot price of Dubai crude oil, 3) the change in the log of the yen/dollar nominal exchange rate, 4) the change in the breakeven inflation rate (i.e., the difference between the yield on 10-year Japanese government bonds (JGBs) and the yield on 10-year inflation indexed JGBs), 5) the change in the interest rate on 10-year inflation indexed JGBs, and 6) the change in Krippner's (2013) shadow monetary policy rate. S.E. represents heteroskedasticity and autocorrelation consistent standard errors. The sample period extends from 21 August 2021 to 31 December 2025.

*** (**) [*] denotes significance at the 1% (5%) [10%] level.