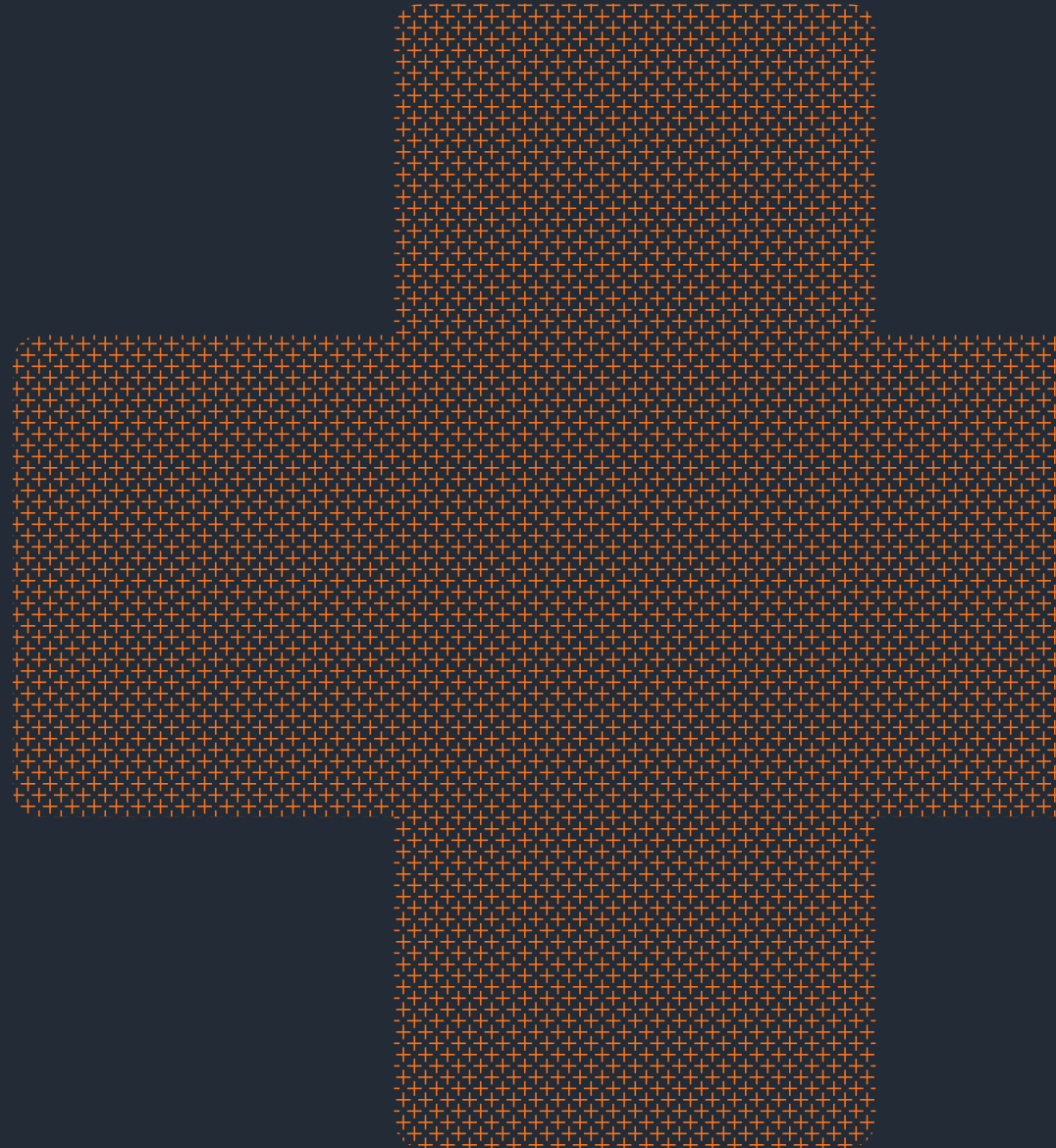

The GARP Risk Index

First Quarter 2010



The GARP Risk Index

Key Findings

- Inaugural Risk Index valued at 109, indicating a higher than average environment for systemic risk
 - Leverage and bank capital ratios seen as having greatest potential for triggering systemic risk in the U.S., with equity values ranked lowest on the risk scale
 - Respondents from China are the least concerned with the threat of systemic risk in the U.S.
 - Pessimism about U.S. economic growth continues to influence the global risk management community
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The GARP Risk Index: An Overview

The GARP Risk Index monitors current global perceptions of eight individual risk factors capable of triggering a systemic risk crisis in the United States.

Assessing Current U.S. Market Conditions

The GARP Risk Index tracks current global perceptions of eight individual risk factors capable of triggering a systemic risk crisis in the United States. Harnessing the expertise and market perceptions of Financial Risk Management (FRM®) designation holders across 48 countries, the GARP Risk Index provides an informed assessment of current U.S. market conditions and their impact on factors that may directly or indirectly contribute to or signal a build-up (or otherwise) in system-wide risk in the U.S.

Survey Methodology

GARP's Financial Risk Management designation is the recognized benchmark for risk management education and certification, with more than 23,000 certified FRM holders around the world. FRM holders from 48 countries participated in the first quarterly GARP Risk Survey, providing an assessment, on a scale of 1 to 5 (1—"Very Little Risk" and 5—"Very Risky"), of their current perceptions about eight individual U.S. market factors that directly or indirectly influence system-wide risk in the U.S. including:

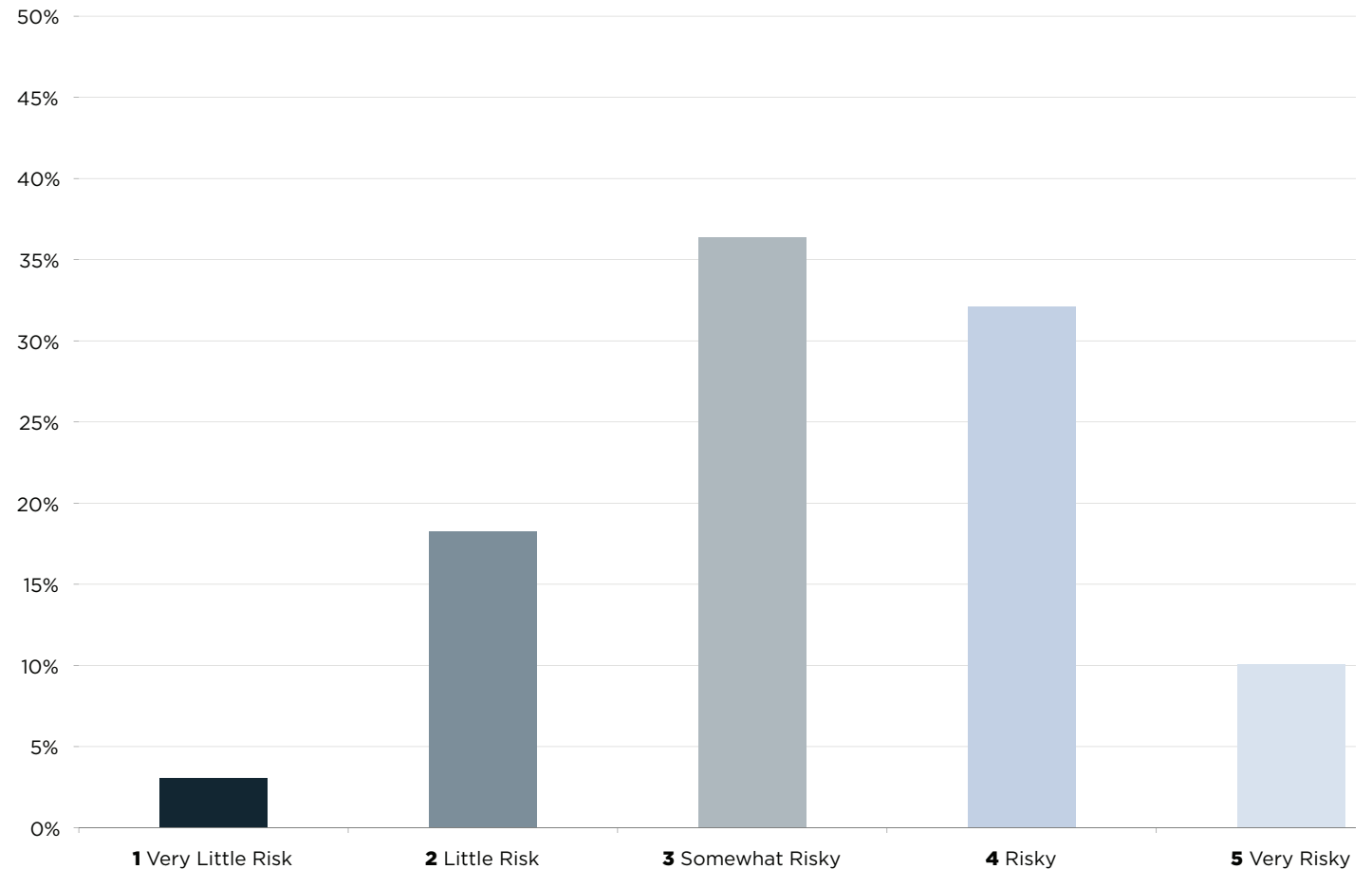
- Health of the macro-economy
- Financial leverage
- Credit spreads
- Health of the U.S. banking system
- U.S. equity market valuations
- Overall traded market volatility
- Commodity prices and operational risk

Survey results were used to construct the GARP Risk Index, a scaled index based on the risk-weighted average responses for the eight factors surveyed. (See Appendix A for a description of each factor)

GARP Risk Index Valued at 109—a Higher Than Average Perception of Systemic Risk

With a value of 109 (equivalent to an aggregate weighted average response of 3.27) the initial GARP Risk Index is slightly higher than the base index of 100 (equivalent to an average risk rating of 3). There are a number of possible explanations for the current index value including: i) a bias towards a potential build-up of systemic risk, ii) a behavioral bias by finance professionals stung by the recent market collapse and iii) a sampling bias among risk professionals whose primary focus is on risk. Chart 1 illustrates the response distribution for all factors across the risk scale.

Chart 1 | Total Response Distribution (1st Quarter 2010)

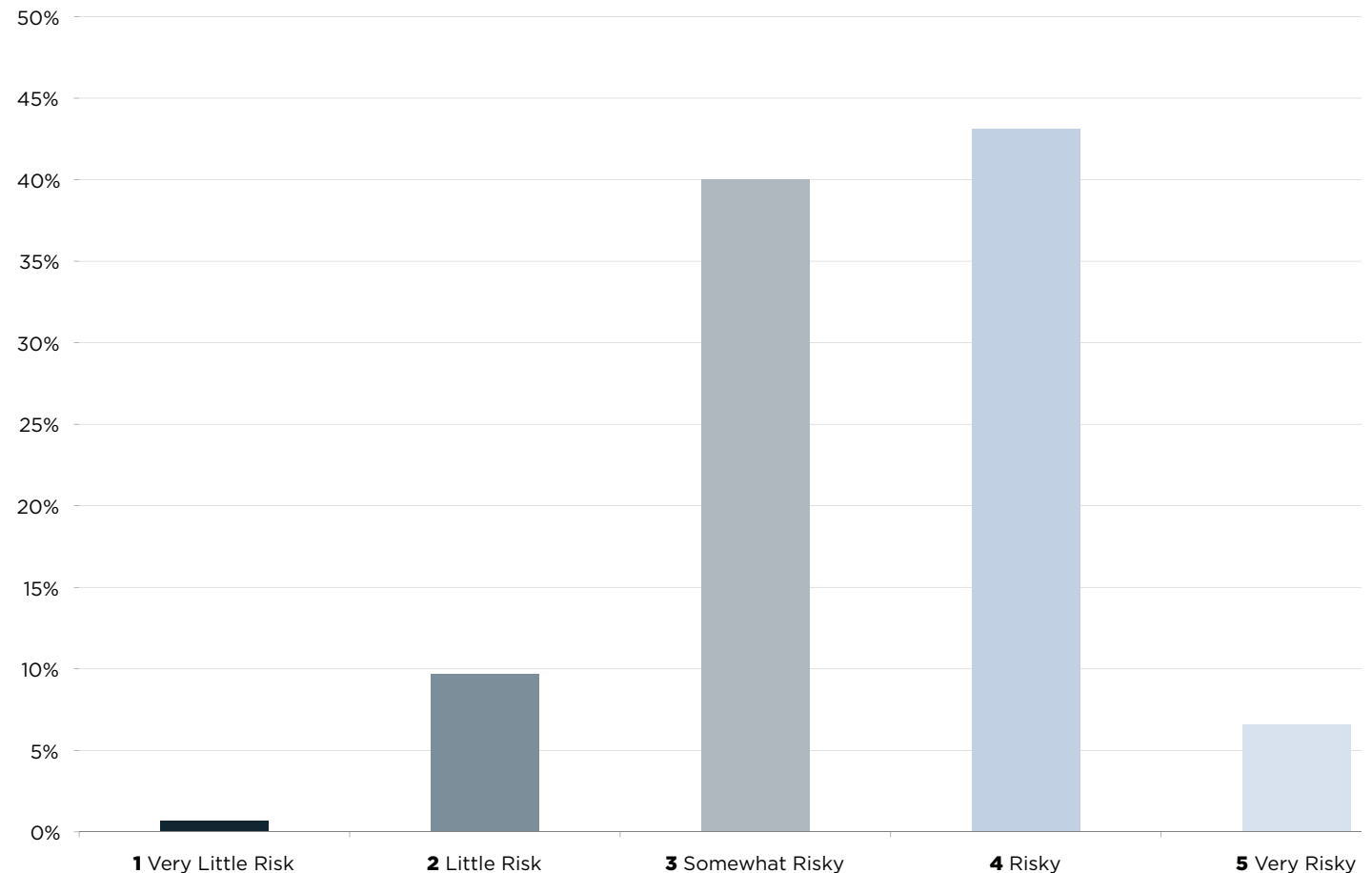


Perceptions About U.S. Systemic Risk Differ When Assessed Independent of Defined Market Factors

Systemic risk may be best summarized as an economic shock or event(s) that triggers a market dislocation and creates illiquidity with the potential for failure of one or more institutions, jeopardizing the integrity of the local or global financial system. Fallout from the recent global financial crisis has created an acute awareness of systemic risk in financial markets. In the U.S., as elsewhere in the world, politicians, regulators and market practitioners continue to debate rules and practices that would effectively mitigate risk. While much has been written about the causes of systemic risk, not enough has been done to measure or signal its potential build-up.

We also queried participants directly about the current potential for systemic risk in the U.S., taking into account all factors (inclusive or exclusive of the eight market factors that we surveyed) they deemed relevant in making such an assessment—Chart 2 summarizes the response distribution. When viewed independently the assessment of systemic risk was more heavily skewed toward the “Risky” category resulting in a scaled, risk weighted average of 115 (equivalent to an aggregate weighted average response of 3.45).

Chart 2 | Systemic Risk Assessment (1st Quarter 2010)

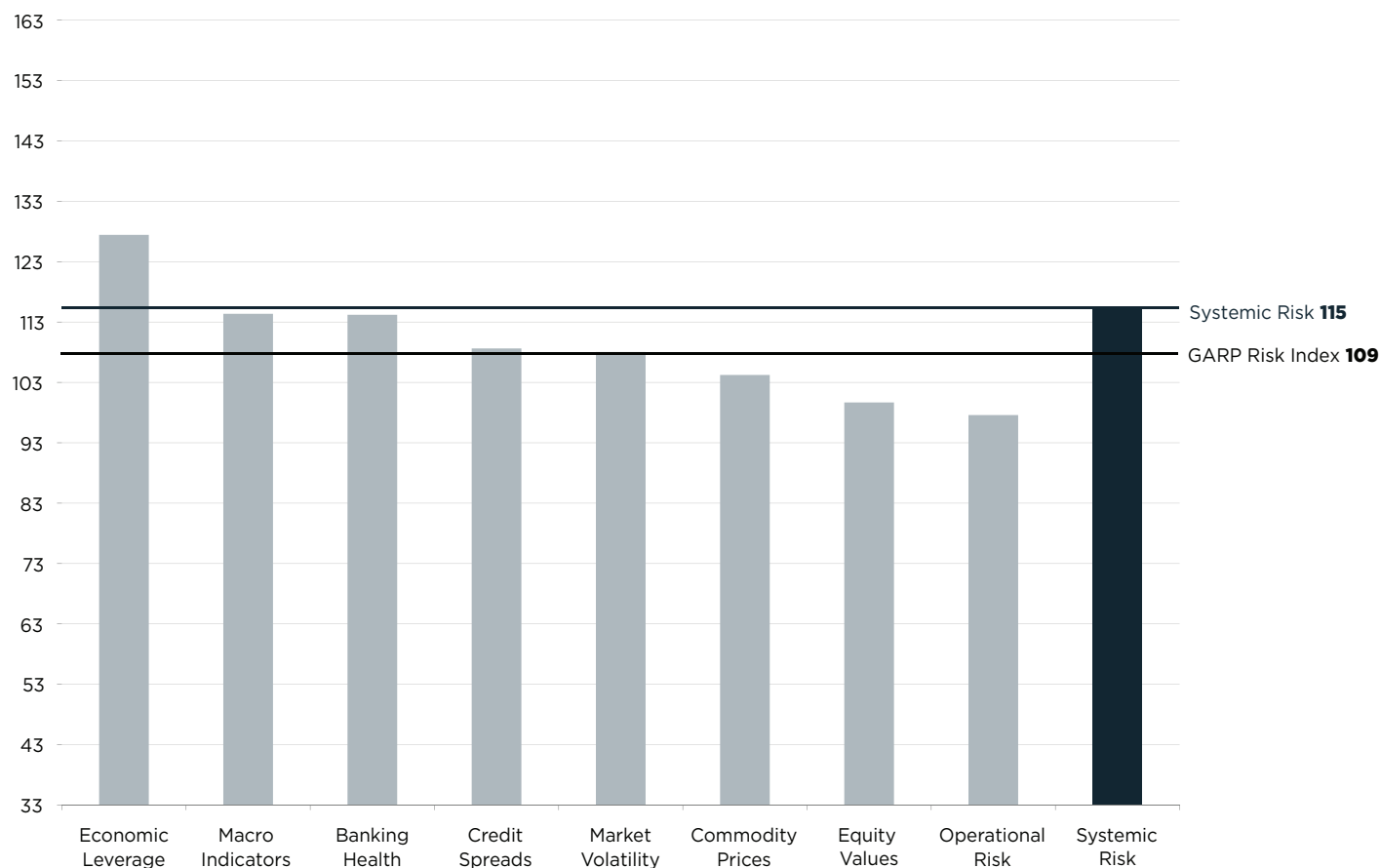


Causes for Divergence—Regulatory Uncertainty, Correlation Across Risk Factors?

The divergence between the GARP Risk Index and the independent assessment of systemic risk (109 vs. 115) is illustrated to the right in Chart 3. One explanation may simply lie in the fact FRM Holders have consciously, or perhaps sub-consciously, emphasized the individual factors they considered most risky in developing an opinion about systemic risk. Another possible explanation may relate to current regulatory uncertainty in the U.S., most importantly changes in the financial system.

Correlation across risk factors could also be driving the divergence. For example, one important observation taken from the current crisis is the inter-connectedness of markets and risks; if risk rises substantially in one market it can quickly affect other correlated markets leading to a higher probability for a systemic failure. Moreover, correlation generally increases during periods of stress. Although no individual market factor surveyed was overly problematic, there were higher degrees of risk associated with certain individual factors. We will track these relationships closely going forward to identify future trends as risk perceptions evolve.

Chart 3 | GARP Risk Index Components vs. Systemic Risk (1st Quarter 2010)

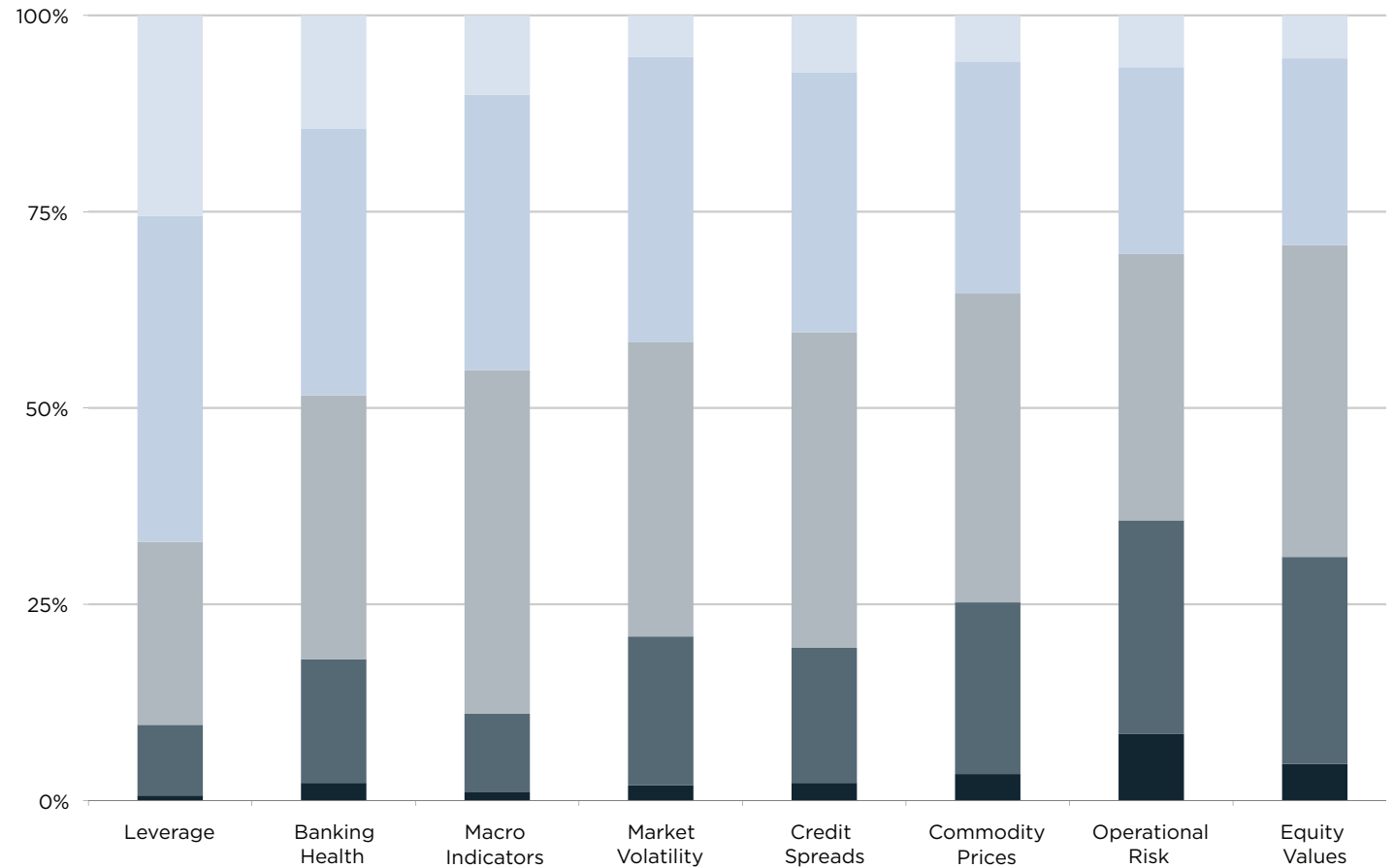


Equity Values Ranked Lowest on the Risk Scale

Chart 4 summarizes the distribution of perceived risk for each market factor surveyed. It clearly illustrates the areas where risk managers are currently focusing their attention, namely leverage and bank capital ratios, followed by macro-economic indicators like GDP growth and unemployment. Equity values, which have done well in the last year, are lowest on the risk scale. In part, this may indicate that risk managers are still focused on trying to fix the factors that directly caused the credit crisis (e.g. financial leverage and structure of the banking system) which does not bode well for credit expansion. It also supports a view that the rise in equity values in the past twelve months relates to a market correction or overstated condition.

The relatively low risk assessment for operational risk is also noteworthy since there is an argument to be made that operational risk is or should be considered highest during times of stress and constrained resources. The optimism towards operational risk portrayed in survey responses may simply be a reflection of the challenges in quantifying it, causing risk perceptions to remain relatively constant regardless of instability in the financial system.

Chart 4 | Response Distribution Across the Risk Spectrum (1st Quarter 2010)

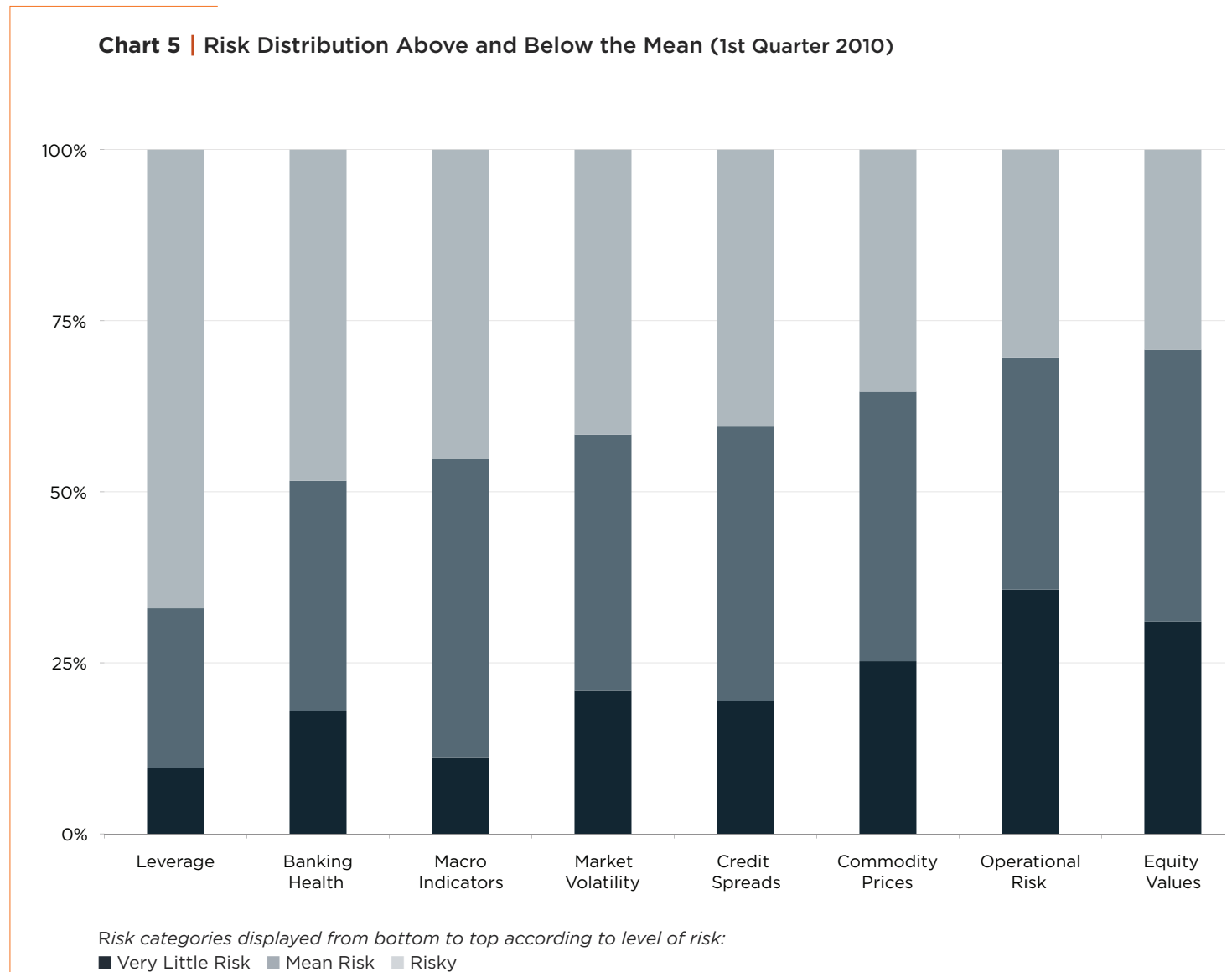


Risk categories displayed from bottom to top according to level of risk:
 ■ Very Little Risk ■ Little Risk ■ Mean Risk ■ Risky ■ Very Risky

Leverage and Vulnerability of U.S. Financial System Seen as Having Greatest Potential Risk

On a scale of 1 to 5 more than 67% of the FRM Holders surveyed rated leverage a 4 or 5. Health of the U.S. banking system also remains a concern, with nearly half of all FRM Holders responding that the current state of the U.S. financial system was risky or very risky when considering its impact on a potential build-up in systemic risk. This may be an indication that global market participants believe more can or should be done to affect change in the U.S. banking system. Chart 5 summarizes the distribution of risk perceptions above and below the mean, highlighting the factors of greatest and least concern.

Despite measurable growth in the Index of Leading Economic Indicators in the past year, pessimism about U.S. economic growth continues to influence the global risk management community. Forty-five percent of FRM Holders surveyed ranked the effect of U.S. macro-economic conditions a 4 or 5 when considering its potential impact on systemic risk today—perhaps indicating concern that continued weakness in U.S. labor markets will drive consumer defaults, putting a significant strain on bank credit portfolios and requiring greater loan loss reserves and bank capital. Responses for commodity prices, operational risk and equity values were generally distributed evenly across the risk spectrum.



Risk Professionals in China are Least Concerned; Canadians More Pessimistic

Data from the 12 countries with the highest proportion of total responses (more than 83%) was analyzed to better understand risk perceptions across geographies. Risk perceptions of U.S. based FRM Holders were closely disbursed around the mean with leverage and health of the banking system the two biggest concerns. Canadian FRM Holders were more pessimistic than their U.S. neighbors about risk in the U.S., with particular concern about banking health, macro indicators, credit spreads and operational risk. Risk professionals in China demonstrated little concern about a build-up in U.S. systemic risk or the effects of leverage, macro-economic indicators and credit spreads. Moreover, the aggregate response for China indicates the least concern about a build-up of risk in the U.S. among the twelve countries we focused on in this analysis.

The table to the right summarizes the average risk weighted response for each market factor. The highest and lowest risk assessment for each factor has been highlighted in orange and white respectively.

Table 1 | 12 Countries with Highest Total Responses (1st Quarter 2010)

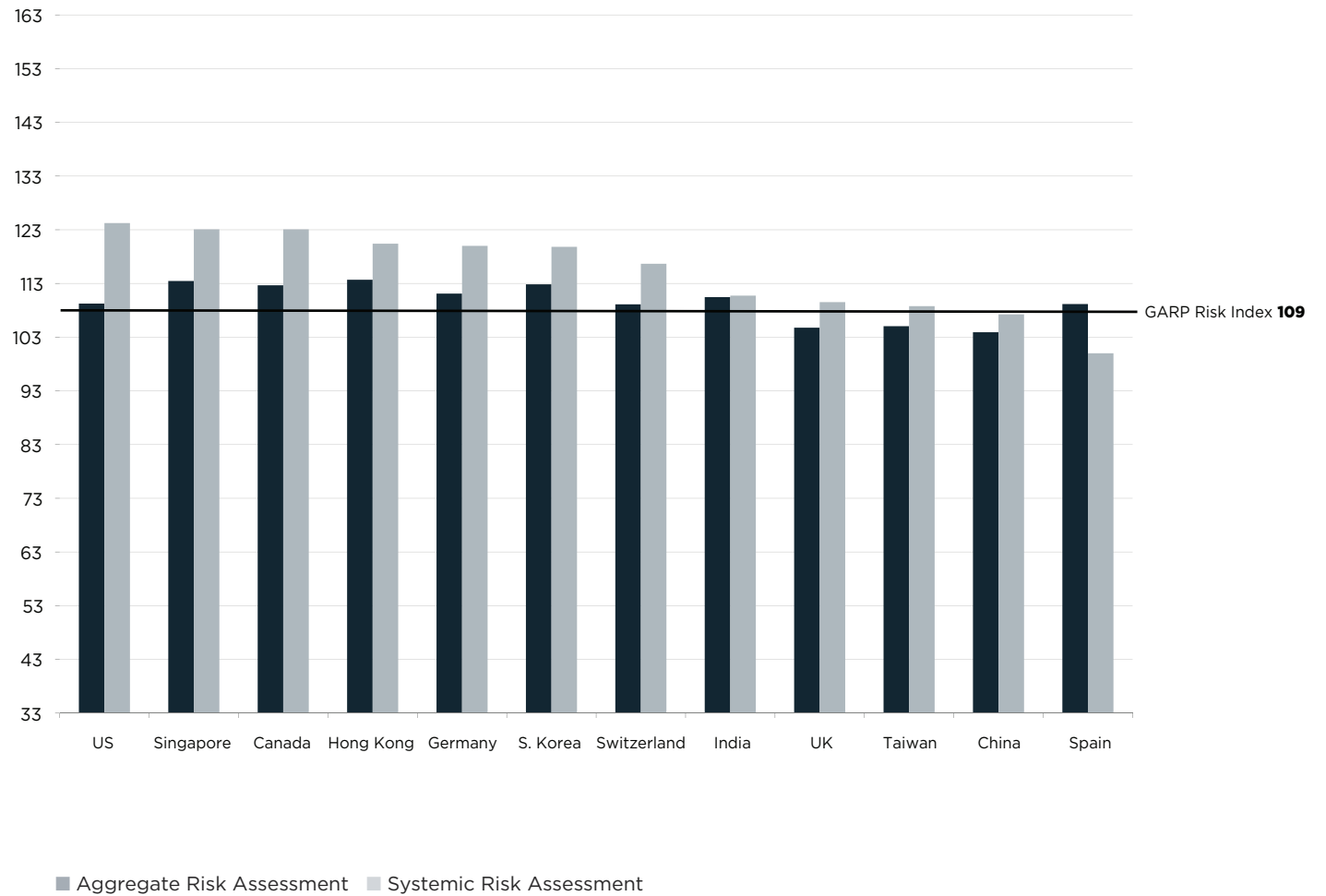
Market Factor	Canada	China	Germany	Hong Kong	India	S. Korea	Singapore	Spain	Switzerland	Taiwan	UK	US
Leverage	3.76	3.52	3.60	4.19	3.70	3.88	4.20	3.77	3.86	4.07	3.77	3.89
Banking Health	3.73	3.23	3.40	3.59	3.20	3.51	3.54	3.10	3.81	3.21	3.14	3.65
Macro Indicators	3.59	3.26	3.69	3.42	3.58	3.41	3.50	3.40	3.54	3.56	3.50	3.43
Credit Spreads	3.65	3.04	3.67	3.41	3.32	3.57	3.54	3.20	3.25	3.21	3.21	3.22
Market Volatility	3.19	3.14	3.33	3.35	3.31	3.68	3.62	3.30	3.00	3.21	3.00	3.08
Commodity Prices	2.96	3.09	2.87	3.35	3.25	3.14	3.08	3.40	3.00	2.79	2.86	2.97
Equity Values	2.65	2.88	3.00	3.12	3.12	3.00	3.46	2.90	2.88	2.74	2.86	2.96
Operational Risk	3.23	2.79	2.80	3.12	2.83	2.95	2.54	3.20	2.88	2.58	2.79	3.01
Aggregate Risk Assessment	3.38	3.12	3.33	3.41	3.31	3.39	3.40	3.28	3.27	3.15	3.14	3.28
Systemic Risk Assessment	3.69	3.22	3.60	3.61	3.32	3.59	3.69	3.00	3.50	3.26	3.29	3.73

Note: Representation of average survey responses based on a scale of 1 to 5 (1 Very Little Risk and 5 Very Risky)

Aggregate U.S. Risk vs. Current U.S. Systemic Risk

Chart 6 depicts the assessment of aggregate U.S. risk (based on the market factors surveyed) and current U.S. systemic risk as perceived by global FRM holders. It is interesting to note that Spain was the only country whose aggregate response for the eight market factors exceeded its independent assessment of U.S. systemic risk. This outcome appears to be a function of the relatively high proportion (20%) of Spain based FRM Holders who indicated very little concern about the current potential for a systemic event in the U.S. (in contrast, less than 1% of all FRM Holders surveyed had the same view).

Chart 6 | Aggregate US Risk Assessment vs. Current US Systemic Risk Assessment (1st Quarter 2010)



Appendix A

Survey of Market Factors

The following eight market factors were assessed by FRM® holders from 48 countries to construct the GARP Risk Index:

Overall Health of the Economy	Rate the impact on risk to the U.S. financial system of various leading, lagging and coincident U.S. economic indicators.
Leverage in the Economy	Assess the potential impact on financial system risk in the U.S. of total current economic leverage, including consumer and business credit.
Credit Spreads	Considering all current credit spreads, including corporate investment grade, high yield and credit default swap spreads and rate their effect on financial system risk in the U.S.
Health of Banking/ Financial System	Assess the current state of the U.S. banking and financial system, including the influence of newly adopted and proposed regulations on financial system risk.
Equity Market Valuations	Indicate perceived risk to the U.S. financial system of current equity market valuations measured across the major U.S. equity indices.
Overall Traded Market Volatility	Considering volatility indicators across each major traded market including equities, fixed income, commodities and foreign exchange, and assess their overall impact on system wide risk in U.S. financial markets.
Commodity Prices	Indicate the perceived risk to the U.S. financial system of commodity valuations with particular focus on precious metal and energy markets.
Operations/Infrastructure/ Strategic Risk	Assess the influence on overall risk to the U.S. financial system of current operational and infrastructure exposures, and strategic business objectives currently adopted by U.S. financial institutions.
Overall Systemic Risk	Maintaining any or all of the above and any other consideration you might have, please rate your assessment of risk in the U.S. financial markets today.

Creating a culture of
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