



# Ultimate Risk Solutions

Powerful,  
Flexible,  
User Friendly

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## DOING BUSINESS IN MULTIPLE ECONOMIES? TEST STRATEGIC OPTIONS WITH URS REAL WORLD™

The new Global Economic Model from Ultimate Risk Solutions enables insurers and reinsurers active in multiple economies or planning to enter new economic zones a tool to test strategic alternatives. **URS Real World™** allows corporate decision makers to measure the impact of macro-economic volatilities on financial results in major regions of the world. It is useful also to governmental agencies and ministries, regulatory bodies, financial institutions, and multi-national corporations.

Companies using **URS Real World™** can quickly and easily model consistent macro-economic scenarios in different countries as they consider resource allocation or product and marketing decisions. The model can simulate the values of GDP growth, inflation, unemployment, and wage growth rates, along with investment rate, interest rate curves, stock market indexes, and exchange rates. As a tool for long range planning, the scenarios can include any number of future years.

At the heart of the Global Economic Model is URS's **Dynamic Equilibrium Model (DEM)**, which reflects the behavior of each economic zone as it responds to supply and demand shocks that create disturbances in the global economy. DEM comprises a system of equations that connect the various aspects of economic activity to changes in primary economic drivers. DEM considers supply shocks as a single driver that affects the state of the economy, yet it is able to reproduce accurately the joint movements of several important economic variables over the historical period starting from the 1950s.

If you're looking to protect your investments in foreign economic zones or seeking to identify the risks involved with entering new parts of the world, let us show you how **URS Real World™** can help you make the right business decision. One of our senior executives will give you a hand-on demonstration of how the model works. Contact **Alex Bushel**, CEO (abushel@ultirisk.com); **Anya Kutsina**, Head of Marketing (akutsina@ultirisk.com); or **Berend Alberts**, Marketing Manager (balberts@ultirisk.com).

## URS SPONSORS ERM CONFERENCE

Ultimate Risk Solutions is a "Gold Sponsor" of the third annual Enterprise Risk Management Conference for the insurance and reinsurance industry to be held in New York City December 7 and 8. The conference will bring together chief risk and financial officers to focus on the latest developments in ERM. Speakers will include senior risk officers from property/casualty and life insurers, Standard & Poor's, and other experts. **Mario DiCaro**, Managing Director at URS, will speak on how to translate management's definition of a risk strategy into a quantitative model. Attendees will learn how to analyze existing and emerging risk factors; define risk appetite to drive strategy and increase profit; learn how to embed ERM into day-to-day decision making; gain a clear understanding of effective capital modeling to increase returns; and learn how the global economic crisis altered ERM in top reinsurance companies. **Alex Bushel**, URS CEO, will be on hand to discuss risk modeling approaches with companies.

## KUTSINA OUTLINES ROLE OF DFA IN ERM

Enterprise Risk Management (ERM) is a process for making decisions that will minimize the impact of risk, and a sophisticated Dynamic Financial Analysis (DFA) model is an essential component of ERM, **Anya Kutsina**, Head of Marketing at Ultimate Risk Solutions, told members of the New York Insurance Association at a recent conference.

In a panel moderated by **Joe Petrelli**, President of Demotech, Inc., the rating agency, Kutsina focused on the importance of DFA models in stress testing to meet regulatory requirements. She pointed out that **Risk Explorer™**, the URS DFA tool, can "quantify in probabilistic terms whether the company will be able to meet its commitments in the future." Using the model, the financial position of a company can be evaluated from the perspective of regulators, agents, and insureds, she explained.

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# SOLVENCY II TAKES EFFECT OCTOBER 31, 2012 PLANNING TODAY FOR THE NEW REGIME

**Q & A** WITH ALEX BUSHEL, ULTIMATE RISK SOLUTIONS CEO:

**Q:** Will Solvency II cause reinsurers to reevaluate their risk management programs? If so, how?

**Bushel:** Every company, insurance or reinsurance, will need to create and maintain internal risk models as a result of Solvency II regulations. Companies that do business in the European Union already are reviewing their risk management programs from top to bottom in order to comply with the new regulations when they go into effect.

**Q:** Solvency II will require more information from reinsurers. How will this affect internal and external risk models?

**Bushel:** Risk models will become more sophisticated and will take more risks into account. For example, the assets and liabilities have been historically managed separately within insurance companies. Solvency II will change that. The models will have to take both into account.

**Q:** Some analysts say actuarial models will have to be reconfigured to meet Solvency II requirements. How will this affect insurers and reinsurers that do business in the EU but are located elsewhere? Will Solvency II cause a restructuring of risk models generally?

**Bushel:** That depends on how sophisticated the risk models were before Solvency II. For the companies that are already advanced in modeling, the change will not be very difficult. For companies that are just beginning the journey, larger effort will be required.

**Q:** Will Solvency II cause insurers and reinsurers to take a more holistic approach to risk analysis by consolidating the risk management programs of various divisions into a comprehensive model?

**Bushel:** That is happening as we speak. Large organizations are investing substantial resources to create comprehensive company-wide risk management programs.

**Q:** How will **Risk Explorer™** be used by companies to meet Solvency II standards?

**Bushel:** **Risk Explorer™** allows companies to create comprehensive internal models with minimal effort. Large companies will be able to model their subsidiaries across the world separately and then seamlessly aggregate them into a single corporate model.

## SOLVENCY II BASICS

### What Is It?

- A set of regulatory standards, requirements, and enforcement procedures that will be applied to insurers and reinsurers in the 27 countries of the European Union.
- Minimum capital requirements; governance standards; supervisory powers; review procedures; annual solvency/financial condition reports.
- Effective October 31, 2012 in order to give companies time to create or upgrade risk management programs, models, and governance procedures.

### Supervisory Review Process (SPR)

- The supervisor (regulator) will require companies to document risk management programs to assure adequate capital including comprehensive risk models and governance mechanisms to assure compliance.
- SPR gives the supervisor power to evaluate compliance periodically and require remedial action when necessary.

### Solvency Capital Requirement (SCR)

- SCR will set capital standards companies must meet in the areas of underwriting, market, credit, and operational risk.
- Companies will be required to calculate adherence to SCR annually utilizing internal models or a standard formula.

### Own Risk & Solvency Assessment (ORSA)

- Insurers/reinsurers must conduct an internal risk assessment as part of the business plan and submit it to the supervisor (regulator).
- ORSA will assure that companies consider the potential risks of management decisions on the firm's capital.

### Models Key to Compliance

- Firms can meet requirements by adopting a standard formula or developing an internal model.
- Internal models are encouraged because they are tailored directly to the risks of the particular company.
- In order to comply, internal models must be approved by the supervisor (regulator).

### Public Disclosure

- Insurers/reinsurers will be required to make public each year a report on their solvency and financial condition.
- The report will set forth the risks inherent in the company's business and the assumptions that underlie risk assessments.
- This process will assure public access to vital information of concern to policyholders, investors, brokers, and interested parties.

### Benefits

- Unify and standardize regulation across Europe.
- Create cross-border capital, risk management, and governance standards to protect consumers.

## 2010 Critical Year

- The extensive, detailed provisions of Solvency II will require companies to reexamine existing risk management programs, financial analysis models, software, staffing, governance procedures, and reporting requirements.
- For many companies, this process will take considerable time, resources, and management attention.
- With more than a year to plan, companies should be ready to function effectively within the new regulatory system when Solvency II becomes effective.

### NEED ADVICE ON RISK MODELING TO PREPARE FOR SOLVENCY II?

#### GIVE US A CALL

If your company does business in the European Union, planning to comply with Solvency II is a high priority. Dynamic Financial Analysis software is essential to conducting the risk assessment required to meet Solvency II standards. At Ultimate Risk Solutions, we have the expertise and experience to help you design the model best suited to your corporate objectives. Companies are encouraged to develop internal models tailored to their specific risks. We can help. Contact a member of our senior team: **Alex Bushel**, CEO (abushel@ultirisk.com); **Anya Kutsina**, Head of Marketing (akutsina@ultirisk.com); **Berend Alberts**, Marketing Manager (balberts@ultirisk.com).

### WHAT THEY'RE SAYING ABOUT SOLVENCY II

#### Ian Cook, Chief Actuary, Willis Re:

"Previously, reserving risk was the actuary's job, pricing risks was the underwriter's job. Your asset risks sat in the treasury function, and nobody had oversight of risk in the broadest possible sense. The role of reinsurance buyers has been changing – they're now increasingly in line with the finance department, often reporting to a reinsurance committee comprising Chief Actuary, Chief Financial Officer, and Chief Risk Officer. That's where the role of the Chief Risk Officer comes in – it's a cross-organization function to bring all the different risks together, and that's going to be enshrined in Solvency II,"

#### Eberhard Mueller, Chief Risk Officer, Hannover Re:

"The regulation (Solvency II) provides a standard capital model but encourages companies to use their own models, since such internal models better reflect a company's individual situation. Internal models need the approval of the regulator, and companies must demonstrate, among other things, that the model is fully integrated into the company's decision-making process."

#### Clive Martin, Reinsurance Partner, Ernst & Young:

"Financial modeling activity has dominated the early phases of Solvency II readiness programs. Models are critical because they play a key role in determining future levels of capital required in a group's legal entities. In some cases, those projections can indicate a

substantial shift from current levels. Also, in firms where the cost of capital is increasing, models are helping businesses understand the financial impact of static levels of capital."

#### Brian McGuire, Senior Vice President, U.S. RE

"Solvency II will require that companies adopt a more holistic approach that includes all the risks faced by the enterprise. With reinsurance becoming more and more accepted as a form of capital, companies will want to select the reinsurance structure that best fits their risk management hedging strategy and optimizes the mix of capital from debt, equity, and reinsurance. Reinsurance optimization in the current regulatory environment requires reinsurance intermediaries to possess sophisticated economic models. Is preparing for and implementing the necessary protocols for Solvency II expensive? That all depends, because when clients work in conjunction with their reinsurance intermediary to establish sound and efficient protocols, the output will allow management to effectively leverage both its risk and its capital structure to create additional shareholder value."

#### John Andre, Group Vice President, A.M. Best:

"We certainly support a risk-adjusted view of an insurance company's operations, and that's one of the tenets of Solvency II. Who knows a business better than the people running it? So we're open to any and all company models that are shared with us, and we'll make adjustments as appropriate. Hopefully, that's going to make for a more informed view of a company's capitalization from our perspective."

#### Margarita von Tautphoeus, Head of Solvency Consulting, Munich Re:

"All these rules and descriptions and procedures on how to handle certain risks have come under one joined approach. The more complex your business model is, the more you need a stochastic model to take into account all those different drivers that can impact your business. Imagine an insurer is either trying to acquire an entity or set up a portfolio in another area or another line of business. If you're able to simulate assumptions on how that business would work and what impact that would have on the overall financial data and balance sheet – this is one of the overall purposes of a good model."

### S&P PUBLISHES NEW CRITERIA FOR SCORING ENTERPRISE RISK MANAGEMENT PROGRAMS

Standard & Poor's Rating Services recently published new criteria for scoring companies' Enterprise Risk Management programs. The rating agency pointed out that with so many companies scoring "adequate," the category needs to be broken down to reflect more accurately the quality of ERM submissions. The "Adequate" category has been divided into three levels: "Adequate, Adequate with Strong Risk Controls, and Adequate with Positive Trend." S&P explained that the new criteria apply fundamental principles that define credit risk and ratings opinions.

"Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer or issue-specific factors, or new empirical evidence that would affect our credit judgment," S&P observed. The reports are available to RatingsDirect subscribers at [www.ratingsdirect.com](http://www.ratingsdirect.com) or can be purchased by calling 212-438-9823.

## INDUSTRY LEADERS SELECT RISK EXPLORER™

We're pleased to advise that three new clients have just chosen **Risk Explorer™** as the Dynamic Financial Analysis model best suited to their needs. We welcome **The Arch Group, Delos Insurance,** and **Everest Re** to the Ultimate Risk Solutions family. The rapid growth of URS and the acceptance of our products by leaders in the global insurance and reinsurance industries testify to the superior performance of **Risk Explorer™**. As an independent financial analysis software developer, we believe that all our clients are best served by a company that is not tied to a large corporate group with diversified products and other priorities.

**Risk Explorer™** is reviewed and updated frequently to assure that you have the most sophisticated technology available today along with training and support services. Our new Global Economic Model, **URS Real World™** enables companies to simulate consistent, macro-economic scenarios. We'll be pleased to give you a demonstration of this unique, new product. Our research, development, and product support are focused on providing the most effective, cost-efficient, easy-to-use financial analysis software to meet the needs of insurers, reinsurers, and brokers. We welcome your feedback and commit to follow through on your suggestions.

**Alex Bushel**  
Chief Executive Officer

**Anyia Kutsina**  
Head of Sales & Marketing

## MORE CARRIERS RELY ON PREDICTIVE MODELING

Predictive modeling is taking on an increasingly important role in decision making at major insurance companies, according to a just published survey by the consulting firm, Towers Perrin. The survey of 90 executives from 81 property/casualty insurers showed that 76 percent of personal lines and 56 percent of commercial lines carriers report that predictive modeling is essential or important to their business planning process.

"The synergies between personal and commercial lines suggest predictive modeling will quickly become more pervasive among all kinds of carriers," said **Brian Stoll**, Senior Consultant at Towers Perrin. Utilization of the model can be expanded from pricing and risk selection to catastrophe management, reinsurance, marketing, and claims, he observed. **Klayton Southwood**, who worked with Stoll on the survey, pointed out that today's models make it possible "to look at data in a multi-variable manner. You can find interactions and identify risk potential – get at those relationships and better understand them"

**Gregory Murphy**, CEO of Selective Insurance Group, told BestWire recently that his Company is "concentrating on the factors we can control such as using predictive modeling on all lines of business."

## FEEDBACK FROM OUR CLIENTS

### Risk Explorer™ Outperforms in:

#### Functionality:

- Easy to learn and use with a familiar Microsoft Office application.
- Enables a company to model itself holistically, pricing individual deals as well as the aggregate, and can constantly monitor solvency.
- Second to none in calculating distributions.
- Projects impact on profit and loss of any catastrophe and indicates best reinsurance option according to defined risk preferences.

#### Efficiency:

- Profiles that would take a team of experts months can be accomplished in a couple of weeks. Scenarios can be analyzed in minutes.
- Powerful statistical methodology supports strategic decisions.
- Simulations and financial statement projects produced quickly.

- Transparent projections; employs well established statistical and mathematical modules.
- Transparent analyses, unlike "Black Box" approach of competitors.

#### Business Production:

- Enables users to convince external agencies of ability to manage risk with accurate projections instead of approximations.
- Improves competitiveness and profitability; important to build investor confidence.
- Makes pricing more accurate; helps avoid under pricing risks.
- Demonstrates expertise in risk management to prospective clients, regulatory authorities, and rating agencies.
- Backs up advice to clients based on judgment with statistical and mathematical processes.