Technical Release Notes – Version 12.1

MarketStance Version 12.1 Technical Release Notes

Monday, June 24, 2013

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Executive Summary

Commercial Insight version 12.1 (V12.1) incorporates major methodological improvements in the calculation of inland marine premiums for specific sub-lines as well as updates rates for both monoline property and BOP accounts. These rating and methodological changes are discussed in the following sections while the update's exposure growth forecast changes are presented in a separate outlook document that will follow shortly.

Inland Marine:

Commercial Insight V12.1 substantially improves our coverage of the major inland marine (IM) sub-lines written for commercial entities. These IM estimates apply specific rates in a "bottom-up" approach for eight major commercial IM sub-lines.

While anecdotal statements about the size of major IM sub-lines abound, ours are the first estimates in the industry to take this detailed exposure, rate and buying propensity approach and apply it to data by class of business, size of account and location of risk. In the process, we are breaking the statutory annual statement data for written inland marine premium into estimates for eight sub-lines that make up our current market estimate: Bailee Customers (e.g. dry-cleaning, laundry), Builders Risk, Contractors Equipment, Equipment Sales/Rental, Jewelry Dealers, Motor Truck Cargo Liability, Transit, and Warehouse Liability. ***Please turn to page three to learn more…***

BOP Market Review:
We continue reviewing and revising our BOP market estimates using the wealth of rate filings data and other sources published by state Departments of Insurance.

From a statutory premium standpoint, BOP premiums largely elude any exact state or national benchmark. Carriers combine BOP premiums with other types of packaged business on the commercial multi-peril (CMP) statutory line 5; BOP is not reported separately from the rest of CMP. This provides a special challenge for testing the size of our BOP market estimate, compounded by the fact that each carrier views the BOP market through the lens of their own book. While we know the size of the market is smaller than total CMP, the real question is by how much?

BOP rate filings data enable some powerful tracking and testing devices for our estimated BOP premiums, specifically to confirm that our BOP US market estimate – currently estimated to be $16.7 billion -- or 50% of 2011 CMP direct written premiums (version V12.1, CY 2011) – accurately reflects the BOP market. ***Please turn to page eight to learn more…***

Who to contact for more information

Please contact Gail DeLucia in our Client Services department at ms@marketstance.com / 888-777-2587 or your Regional Relationship Director if you have any questions or service needs. We value your business, and thank you for your continued support!

Section 1 –Estimates for Specific Inland Marine Sublines

Commercial Insight V12.1 substantially improves our coverage of the major inland marine (IM) sub-lines written for commercial entities. These IM estimates apply specific rates in a “bottom-up” approach for eight major commercial IM sub-lines including the following based on distribution of premium:

1. Motor truck cargo
2. Transit
3. Builders risk
4. Warehouse liability
5. Equipment sales / rental
6. Contractors equipment
7. Jewelry dealers
8. Bailee customers

While anecdotal statements about the size of major IM sub-lines abound, ours are the first estimates in the industry to take this detailed exposure, rate and buying propensity approach and apply it to data by class of business, size of account and location of risk. In the process, we are breaking the statutory annual statement data for written inland marine premium into estimates for:

- Specific sub-lines purchased by commercial entities, which account for 59% of IM’s $13.6 billion in statutory premium written.
- Sub-lines purchased by entities outside the commercial sector, and hence not tracked in Commercial Insight—comprising about 25% of the IM reported total.
- Other, more minor sub-lines purchased by commercial entities, but not yet tracked in Commercial Insight—estimated to account for another 17% of IM written premiums.

Much like our introduction of the Farmowners’ Multiperil and BOP market data in 2004-06 and comprehensive revisions of the Workers’ Compensation and E&O markets released in 2010-11, the revised commercial IM estimates mark a significant milestone for MarketStance and our clients, many of whom are currently growing their Inland commercial business in response to the line’s perceived low combined ratios. The new estimates offer a powerful new tool for market and Inland segment selection.

Table 1 illustrates the substantial changes in the distribution of IM direct written premiums reported in our Commercial Insight V12.0 and V12.1 products, tabulated by 1-digit SIC class of business. As the industry details show, the prior estimates were substantially lower in three key areas: Transportation, Wholesale, and Construction risks. This reflected the limited data sources related to market loss costs, rating features, and exposures in these key areas.

Table 1. Industry distribution of Inland Marine Premiums by Version

Industry		V12.1 (CY 2011)		V12.0 (CY 2011)	
SIC1	**Name_SIC1**	**Inland Marine Direct Written Premiums (MM)**	**Pct.**	**Inland Marine Direct Written Premiums (MM)**	**Pct.**
0	Ag, Forest, Fish	20	0%	304	2%
1	Mining	98	1%	297	2%
2	Construction	879	11%	511	4%
3	Manufacturing	324	4%	2,407	18%
4	Trans, Comm, Utility	3,225	41%	1,866	14%
5	Retail Trade	255	3%	1,402	10%
5W	Wholesale Trade	1,634	21%	1,588	12%
6	Finance, Insurance, Real Estate	136	2%	1,314	10%
7	Services	1,035	13%	2,818	21%
9	Government	352	4%	1,122	8%
9U	Other	-	0%	2	0%
	All SICs	**7,957**	**100%**	**13,630**	**100%**

Source: MarketStance Commercial Insight Hybrid Data

And, indeed, Inland Marine's complexities abound since this line is not really one consolidated line of coverage at all but is comprised of a number of distinct sub-lines. Eight of these sub-lines make up our current market estimate: Bailee Customers (e.g. dry-cleaning, laundry), Builders Risk, Contractors Equipment, Equipment Sales/Rental, Jewelry Dealers, Motor Truck Cargo Liability, Transit, and Warehouse Liability.

As their names indicate, the commercial IM sub-lines span both property and liability types of coverage. Most Inland rates are unfiled in all but a handful of states, and carrier practices vary widely with respect to that large fraction of true IM exposures related to premiums packaged and filed on the CMP lines in the statutory data. Making matters worse, the statutory premiums reported by carriers aggregate both personal and commercial premiums within the Inland Marine line of business.

Table 2. Commercial Insight V12.1 Inland Marine Premium Distribution and Estimation Processes by Subline

Inland Marine Subline	Pct. Commercial IM Direct Written Premium	General description of line estimates & procedures
Motor truck cargo liability	**23%**	Liability coverage purchased by common carrier freight haulers. Estimates are based on the probable commodity composition of loads hauled, territory served, and distance traveled, using the BEA input-output and related output data series and Census Commodity Flow Survey, and MarketStance's custom mapping of BEA commodities to Inland Marine commodity classifications.
Transit	**22%**	Premiums for property in transit are largely related to private transport exposures on the owners' trucks. Shipments related to capital goods, intermediate and finished goods estimated separately for four modes of transportation (private truck, common carrier, rail, and air) under a fixed set of title-transfer assumptions. Each major class of commodity tracked and estimated separately, using appropriate commodity classifications and rating factors. Sources include the BEA input-output and related output data series and Census Commodity Flow Survey, and MarketStance's custom mapping of BEA commodities to Inland Marine commodity classifications.
Builders' risk	**10%**	Coverage purchased by the owners of structures, both private and public sector and coverage purchased by general contractors. Capital expenditures estimated for all operating locations, based on BEA capital expenditure estimates by industry and MarketStance's revenue growth forecast.
Warehouse liability	**8%**	Liability for goods stored and handled by general warehouses - exposures and premiums for storage and handling estimated separately, based on Economic Census series on the product line composition of warehouse revenues.
Equipment sales/rental	**8%**	Equipment sales and rental, including both on-site and off-site risks.
Contractors' equipment	**6%**	Construction and building services, both owned and rented equipment.
Jewelry dealers	**1%**	Jewelry in inventory and transit estimated separately for three specific sectors - wholesale, retail, manufacturers.
Bailee customers	**<1%**	Dry cleaning and laundry services, adjusted for territory-specific factors such as the percent of business revenue likely to be laundry as opposed to dry cleaning, as reported in the Economic Census.

Inland Marine Subline	Pct. Commercial IM Direct Written Premium	General description of line estimates & procedures
Other commercial sub-lines or unallocated	**22%**	Direct written premiums in sub-lines that we do not presently cover in our current estimates, such as Towers, Events, Musical Instruments, Photographic Equipment, Physicians and Dentists Equipment, Installation Floaters, Theatrical Property, Fine Arts Dealers, Valuable Papers & Records, Accounts Receivable, and Museums. Also may consist of IM premium that we currently assume to be filed on CMP forms by virtue of account size, following the guidance we have received thus far from the underwriting community, but that are separately filed as IM.
Source: MarketStance Commercial Insight V12.1 (May 2013)		

Our modeling team spent several months untangling these and other challenges, deepening our understanding of each subline's exposure basis, loss costs, and the various sources of government data that could be used in our modeling procedures, such as the Census Commodity Flow Survey, the Bureau of Economic Analysis Input-Output accounts, and the Economic Census.

We found only anecdotal evidence of the relative size of each subline. To the best of our knowledge, no other information provider has attempted to estimate the Inland Marine line at anything other than a national or state level of detail—i.e. statutory data. Up until now there simply were no published estimates of the *commercial IM market*, let alone the IM market by commercial subline, not to mention the IM market by county, 6-digit industry, and company size.

Authoritative industry bodies such as the Inland Marine Underwriters' Association (IMUA) regularly bemoan the lack of credible national commercial market data.[1]

[1] For instance, IMUA begins its 2010 annual report of "Trends & Developments" with this disclaimer: "Obtaining 'credible' industry-wide commercial inland marine specific premium and loss data is difficult on several fronts. First, only A.M. Best's publishes industry-wide data on a consistent basis each December in *Best's Review*, **but this data is a combination of both personal and commercial inland marine presented in aggregated format**. Reporting organizations such as AAIS, ISO and PCIAA do publish information by class of business that they provide to IMUA; however, **this data comes only from companies that belong to and actually report to them**. The Insurance Information Institute publishes an annual report entitled *iii Insurance Fact Book*, but **this information is in summary format sourced from the NAIC Annual Statement Database**. Finally, Conning Research & Consulting periodically publishes their *Conning Industry Insight...Inland Marine Insurance* **which cites as its source company statutory filings** . . . . As with any data, **it is only as good as individual company coding and reporting practices**, and subsequently, the reporting body's analysis. From various presenters at IMUA annual meetings and industry anecdotal stories**, IMUA is aware of interesting interpretations and coding practices for the inland marine line**. Therefore, the statistical data shown in Trends & Developments is not precise by accounting or actuarial standards . . ." (our emphasis).

Methodological Approach – Inland Marine

We now report premiums in the eight commercial Inland Marine sub-lines for which we have very solid exposure and rating data from an official government or industry body. The total for these sub-lines is substantially less than the $13.6 billion reported in statutory data for two key reasons.

First, as mentioned, much of inland is personal, not commercial. Our first break from past reporting was to develop a reasonable model of how much is personal and how much is commercial premium, which we had not done before. The IMUA "Trends and Developments" states: "informed industry estimates place the commercial inland marine portion at 70% to 80% of the total volume" (p.1).

If these anecdotal estimates are correct, 20-30% of the $13.6 billion Inland Marine market (CY 2011) or up to $4 billion is the cost for insuring household property such as yachts, jewelry, furs, fine art, musical instruments, etc.

In our model, the rate and amount of luxury ownership varies substantially by territory. Using the *production* of luxury goods and services as an effective territorial proxy for the density of personal IM, we concluded that relatively rich states such as New York, New Jersey, and Connecticut are typically closer to a personal/commercial percentage split of 30/70, and poorer states like Mississippi, Alabama, and Michigan closer to 20/80, with widely divergent distribution of luxury goods by county and ZIP code.

Our first divergence from statutory data amounts to taking $3.4 billion out of the statutory data nationally—our gross estimate of *personal* IM written premium for 2011. This leaves $10.2 billion in the national commercial IM market.

Second, there are many commercial IM sub-lines for which exposure data are yet to be identified in a reliable, published data series. At present, these are not reflected in our commercial market estimate. Our current market estimates cover nearly $8 billion (78%) of the $10.2 billion commercial market. Some sub-lines may never be within reach, while many others likely have a basis in a statistically credible source, and will require more time to develop.

For example, the FCC produces a detailed data series reporting the exact location, owner, transmission power, and height of all radio, TV, and cellular communications towers in the U.S. This source will take relatively light effort to develop and will likely complement our current commercial IM estimates in the near future.

In contrast, to our knowledge no government data series reflects the exposures required for a credible national estimate of the Event Cancellation subline—but we will continue researching.

Our coverage of the commercial IM market will likely expand in future releases to include sub-lines such as Museums and Radio & Television Towers, provided the exposure data are sufficiently strong. For Commercial Insight V12.1 and V12.2, the new Inland Marine estimates will be available only in aggregate form – that is, for all covered sub-lines as a whole.

We are contemplating a release of an IM sub-lines Advisor product for the fourth quarter of 2013. Special advance tabulations are available now upon request – and we encourage our clients with active interests in IM to review and offer comment on the data in its current form. Contact your Regional Relationship Director if you're interested in an exploratory discussion.

Section 2 - BOP market review and Property Loss-Costs Updates

BOP market review

We continue reviewing and revising our BOP market estimates using the wealth of rate filings data and other sources published by state Departments of Insurance.

We have strong modeling capabilities and data sources at the level of industry/BOP classification, risk size, and territory. However, risk-level factors can and do exclude individual risks from the BOP marketplace, even though the risks meet all of the industry and size criteria provided in the predominant BOP manuals and rate and form filings made today. Collectively, agents, underwriters and field experts apply the true risk-level filters that determine which California small retailers and Florida condominium associations and apartment risks, etc., are truly BOP eligible. They are the eyes of the marketplace, not the manuals.

From a statutory premium standpoint, BOP premiums largely elude any exact state or national benchmark. Carriers combine BOP premiums with other types of packaged business on the commercial multi-peril (CMP) statutory line 5; BOP is not reported separately from the rest of CMP. This provides a special challenge for testing the size of our BOP market estimate, compounded by the fact that each carrier views the BOP market through the lens of their own book. While we know the size of the market is smaller than total CMP, the real question is by how much?

BOP rate filings data enable some powerful tracking and testing devices for our estimated BOP premiums, specifically to confirm that our BOP US market estimate – currently estimated to be $16.7 billion -- or 50% of 2011 CMP direct written premiums (version V12.1, CY 2011) – accurately reflects the BOP market. Likewise, we can test that percentage by state, which ranges widely, from a low of 33% of the CMP line in DC, Oklahoma, and Mississippi to a high of 84% in rental-property-rich Florida, largely reflecting the diverse industry composition of the small commercial market within each state.

While individual carrier rate filings do not represent the market as a whole, our early stage review highlights the enormous variability in BOP appetite and the apparent BOP share of CMP writings by major carrier.

For example:

- In California rate filings, Nationwide's BOP percentage of CMP ranges from 54% to 66% for all policies written in the state from 2002 to 2010.

- Also in the California filings, Farmers' reports its BOP percentage of CMP as 70% from 2008 to 2010. Notably, it is the dominant player in the California CMP market.
- In New York, American Casualty Company of Reading PA (CNA) reported that 73% of its CMP business in New York is BOP.

These and similar observations, though biased toward the largest carriers and unreflective of these states as a whole, support the notion that the BOP market comprises at least 50% of CMP – and probably substantially more. Our California and New York BOP/CMP percentages are 54% and 52%, respectively.

We began reviewing the Arizona market monitoring reports published by the Department of Insurance for the BOP market in June 2012. To our knowledge these are the only surveys of this type conducted by any state DOI and required of all carriers licensed to write BOP business in the state. In 2011 BOP premiums comprised about 32% of the Arizona Commercial Multi-Peril premiums reported on annual statement lines 5.1 and 5.2, according to their survey.

Under our relatively liberal definition of BOP eligible risks, BOP makes up a far greater percentage of the CMP market in Arizona – over 70% in recent Commercial Insight data releases, and 57% at present.

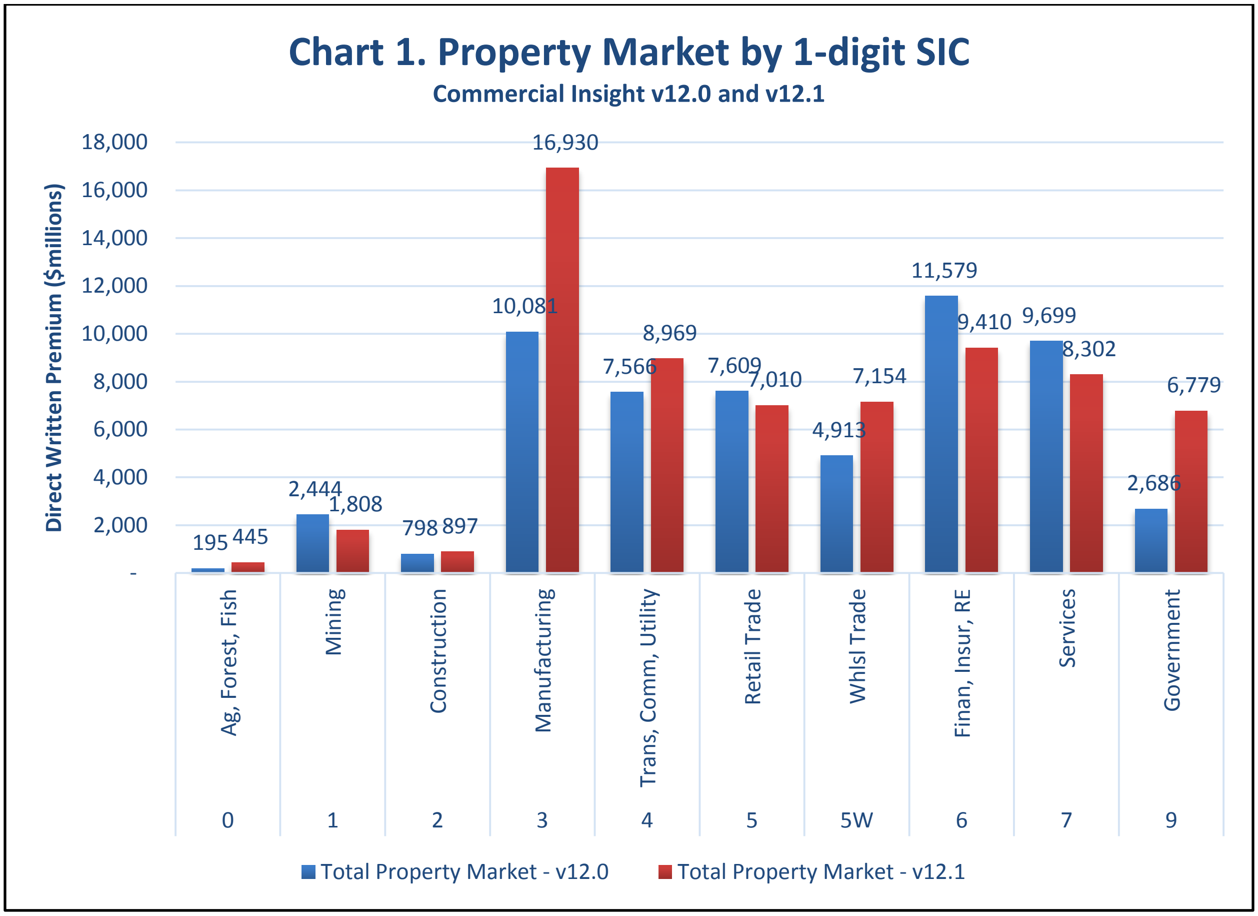
As we have underscored for clients in past technical release notes: "the major issue that confronts any BOP estimate – ours or anyone else's is that BOP is largely in the eyes of the beholder; More than any other line we report, it is a creature of informed underwriting judgments made at the individual risk level" (V11.2 Technical Release Notes, pp. 6-7).

After gathering evidence from such filings sources and in concert with our review of property loss costs (see below) we adjusted our BOP premium estimates from $20.8 billion (V.12.0) to $16.7 billion (V.12.1) -- a reduction of 19.8% from the estimates reported in Commercial Insight V12.0.

Given the relatively carrier-specific nature of "what is and what isn't BOP" – we are more than happy to explore various options for our clients vis-à-vis the BOP line, including incorporating carrier-specific BOP appetite into the variant of Commercial Insight you use. Please contact your Regional Relationship Director if you're interested in an exploratory discussion.

Property Loss Costs Updates

While making the BOP revisions, we updated loss-cost data across all of the property lines, incorporated substantially improved Inland Marine exposure and policy form data, and made other updates, including applying a substantial correction to earlier published estimates of state and local government total insurable value (TIV). Because most government risks are self-insured in a variety of forms, the primary impact of this modified TIV estimate occurred in the alternative markets arena.



Given the simultaneous nature of these revisions, the most appropriate way to look at the whole is in light of the industry distribution of the property market – both the carrier written BOP and mono-line property portions and alternative (e.g. captive, high-deductible, self-insured) market (Chart 1).[2]

Chart 1 illustrates four notable aspects of the revisions:

- Loss costs for manufacturing and wholesale (industrial) equipment are on average 10-25% above prior levels.
- The impact of revisions in retail and services SICs was relatively modest – but far more pronounced in Real Estate, where BOP property premiums are highly concentrated.
- Manufacturing and wholesale industries handle a large fraction of their Inland Marine exposures through alternative markets, which accounts for about half of the increase in premiums in those 1-digit industries.

[2] Inclusion of the Alternative Markets in the comparison is important because of the large percentage of Inland Marine exposures in sublines such as Transit, Warehouse Liability, and Motor Truck Cargo Liability derived from jumbo accounts that insure through captives or alternative markets. By convention, because Inland Marine is largely viewed as a "property" line, we report all Inland Marine liability sublines under our Alternative Market Property premiums line in Commercial Insight 12.1.

- The government TIV correction added $1 billion direct written premium in property lines – with most of the exposure handled through alternative markets, where premium estimates rose by $3 billion.

For further details on these revisions, or any aspect of MarketStance data please feel free to contact MarketStance through your account representative.

Who to contact for more information

Please contact Gail DeLucia in our Client Services department at ms@marketstance.com / 888-777-2587 or your Regional Relationship Director if you have any questions or service needs. We value your business, and thank you for your continued support!