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## Inert-Firm Performance in LINKS Simulations Events

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Revised June 21, 2016

An “inert firm” is an unstaffed/unmanaged firm in a LINKS industry. Such a LINKS firm is “inert” because its decision inputs never change, so an “inert firm” doesn’t respond to its competitive environment.<sup>1</sup>

Why might an instructor include an inert firm in a LINKS industry?

- **For Benchmarking:** Under-performing actively-managed firms may be compared to the performance of a within-industry inert firm. An inert firm might be viewed as having “no strategy” (except being unchanging, non-reactive, and non-responsive) so it may be compared to other actively-managed firms with purposeful strategies to illustrate the value of having a proactive and, hopefully, thoughtful strategy.
- **For Instructional Flexibility:** If a team “implodes” during a LINKS event, a pre-existing within-industry inert firm exists for “displaced” team members to continue LINKS-event participation. Without the presence of an inert firm, an instructor faces the unenviable task of re-locating imploded team members with other LINKS firms or crafting and assessing alternative non-LINKS work to substitute for continuing LINKS engagement.

But, how well does an inert firm perform in a LINKS industry?

Comparative round-by-round results for calendar-year 2012 LINKS industries with an inert firm are shown on the following page, with corresponding graphical presentations of round-by-round results.

For the purposes of illustrative results interpretation, inert firms’ average financial performance was 80.5% of the average firm’s financial performance in Month #7 of LINKS events with the LINKS Supply Chain Management Fundamentals Simulation.

Summary conclusions drawn from these results include:

- Inert-firm performance declines steadily through time, to about 50% of an average actively-managed firm’s performance in 9-10 round LINKS supply chain management simulation events.
- An inert firm’s performance doesn’t turn negative in typical event lengths used by LINKS instructors with LINKS supply chain management simulations.
- There is variation in inert-firm performance across LINKS industries due to differential competitive activity and inherent randomness.

**Conclusion:** Including an inert firm in a LINKS Simulations industry is a viable and useful instructor tactic for mid-length LINKS Simulations events.

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<sup>1</sup> The term “inert” is specifically chosen for its technical definition: “unchanging, non-reactive, and non-responsive to its environment.” It’s not a dummy firm or a computer-managed firm. An “inert firm is a LINKS firm with unchanging decisions from their original starting values established when the LINKS industry was setup and initialized for use by a LINKS instructor.

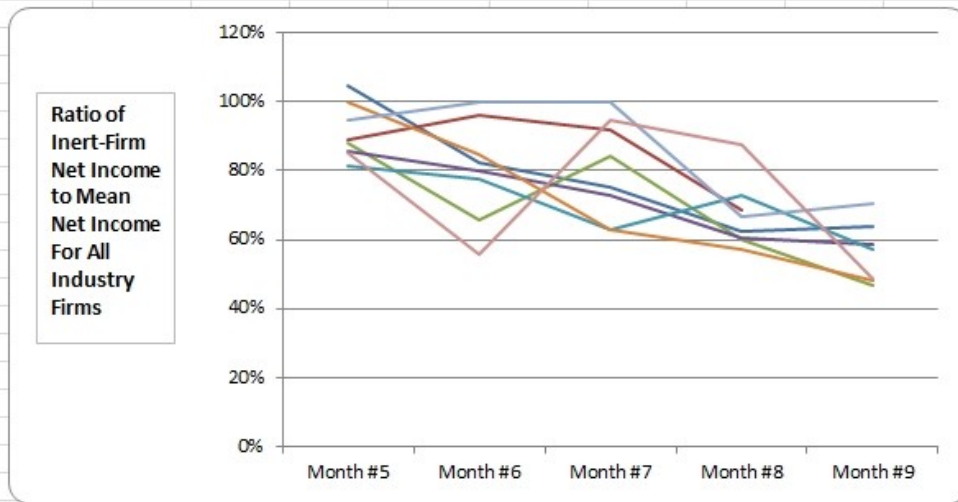
**Ratio of Inert-Firm Financial Performance To Average-Firm Financial Performance in  
Calendar-Year 2012 LINKS Industries With an Inert Firm: Mean Round-By-Round Results**

LINKS Simulations Variant	# of Industries	Month #5	Month #6	Month #7	Month #8	Month #9	Month #10
Supply Chain Management Fundamentals	8	91.1%	80.3%	80.5%	67.0%	56.2%	
Supply Chain Management	8	73.8%	71.6%	61.8%	57.4%	55.3%	44.6%

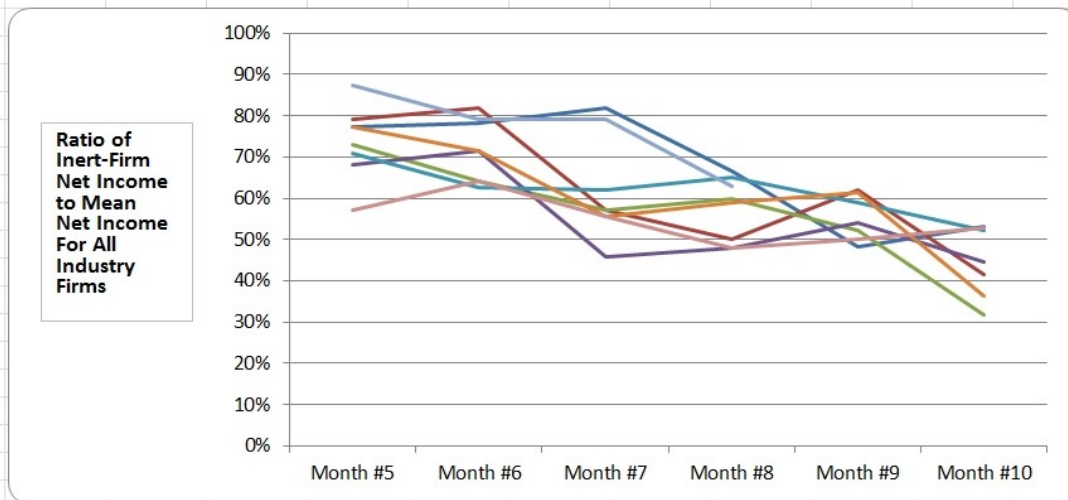
Notes:

1. "Financial Performance" is net income as a percentage of revenue.
2. Different event-lengths reflect instructor usage of these LINKS Simulations variants.
3. LINKS simulations are typically advanced to round #3 (either month #3 or quarter #3, depending on the LINKS Simulations variant) during initialization, to provide some meaningful history (with sales volume variation) as student-teams assume active management of their LINKS firms.

**8 LINKS Supply Chain Management Fundamentals Simulation Industries With One Inert Firm**



**8 LINKS Supply Chain Management Simulation Industries With One Inert Firm**



**Caveats:** In longer LINKS events and with LINKS Simulations variants with most extensive demand-side decisions (such as product development decisions), inert-firm performance might become an issue in later LINKS rounds. And, with additional products, additional regions, and/or cost changes (or other significant mid-event elaborations) added in the middle stages of a LINKS event, an inert firm's performance will inevitably suffer as its actively-managed competitor-firms take advantage of new circumstances and market opportunities.

**Postscripts:**

1. An inert firm is not an instructor-managed firm. **Instructors cannot (and must not) actively compete against their own students in LINKS events.** The "competitor role" conflicts directly with key instructor roles in courses with a LINKS simulation: "traditional" course design and instruction, student assessment, and on-going coaching of LINKS teams.
2. There's no particular need for instructors to draw attention to the existence of an inert firm in an LINKS industry. However, if students ask about the "extra" firm in their LINKS industry, instructors should be truthful, especially to avert concern that the "extra" firm is an instructor-managed firm. But, here, "being truthful" doesn't necessarily mean telling the whole truth ... just describe the extra firm's presence in terms of benchmarking: how does an unmanaged, unchanging, non-reactive, and non-responsive firm perform in the students' LINKS event.