Comparables for Patent Transaction Valuation

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Patent Valuation Conference

Berkeley Center for Law & Technology

February 6, 2008

– Agenda –

- **Gathering Comps: A Simple Study of Patent Brokerage Pricing Levels, 2002-2008**

- Applications for the Findings

- Trends Moving Forward

- Questions

Let's begin by discussing how we performed our study, and what we found

– Our Study –

Methodology	- Document verifiable transactions to establish a record of price levels - Ignore terminated, suspended, and in-process transactions - Opaque market limits perspective - Interview 30+ industry decision makers

Summary Statistics	- Determined price levels
	    - Overall (2002-2008)
	    - 2008

Trends	- 2 key dynamics driving change - 4 key trends

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Our database of 309 deals collected between 2002-2008 indicates a median price per family of $112,000 and a mean price of $383,000

— *Summary Results* —

Factor	Overall
Number of Transactions	309
Total Gross Deal Proceeds	$573 m
Maximum Cost / US Issued + WW	$12 m
Mean Cost / US Issued + WW	$383 k
Median Cost / US Issued + WW	$112 k

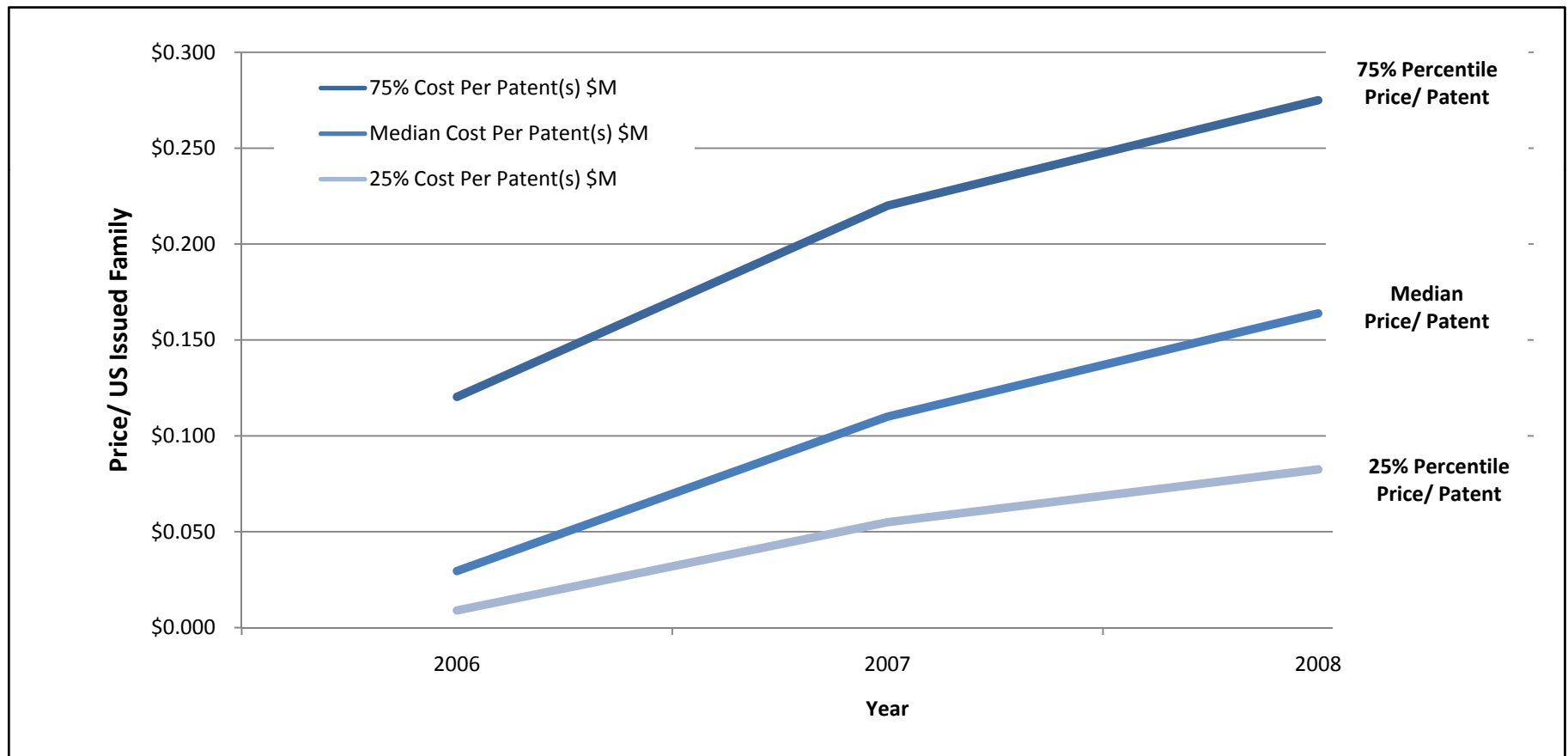*Source: ThinkFire transaction database, 2002-2008*

Recall that these statistics describe the mean and median for ALL KNOWN CLOSED TRANSACTIONS

For best results, we should understand how our planned transaction(s) fit into the set

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Price levels have risen year over year

– Increasing Price Levels: 2006-2008 –

A simple statistical analysis of the transactions contained in the database finds the following distribution of prices

— *Valuation Implications/ Family* —

Percentile	Overall Price / Family (M USD)
90%	$0.681
80%	$0.330
70%	$0.250
60%	$0.192
50%	$0.164
40%	$0.110
30%	$0.110
20%	$0.064
10%	$0.041

Source: ThinkFire Analysis

These figures can be used as multiples:
- Measure of *relative valuation* to an underlying financial asset
- Allows for *relative comparisons*

We can attempt to compare any specific transaction(s) vs. the overall set of closed transactions
- Type of technology
- Size of relevant markets
- Etc.

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We can see that price levels rose year-over-year across the board, with the largest increase among the "preferred" lots

– 2008: Rising Prices Across the Board –
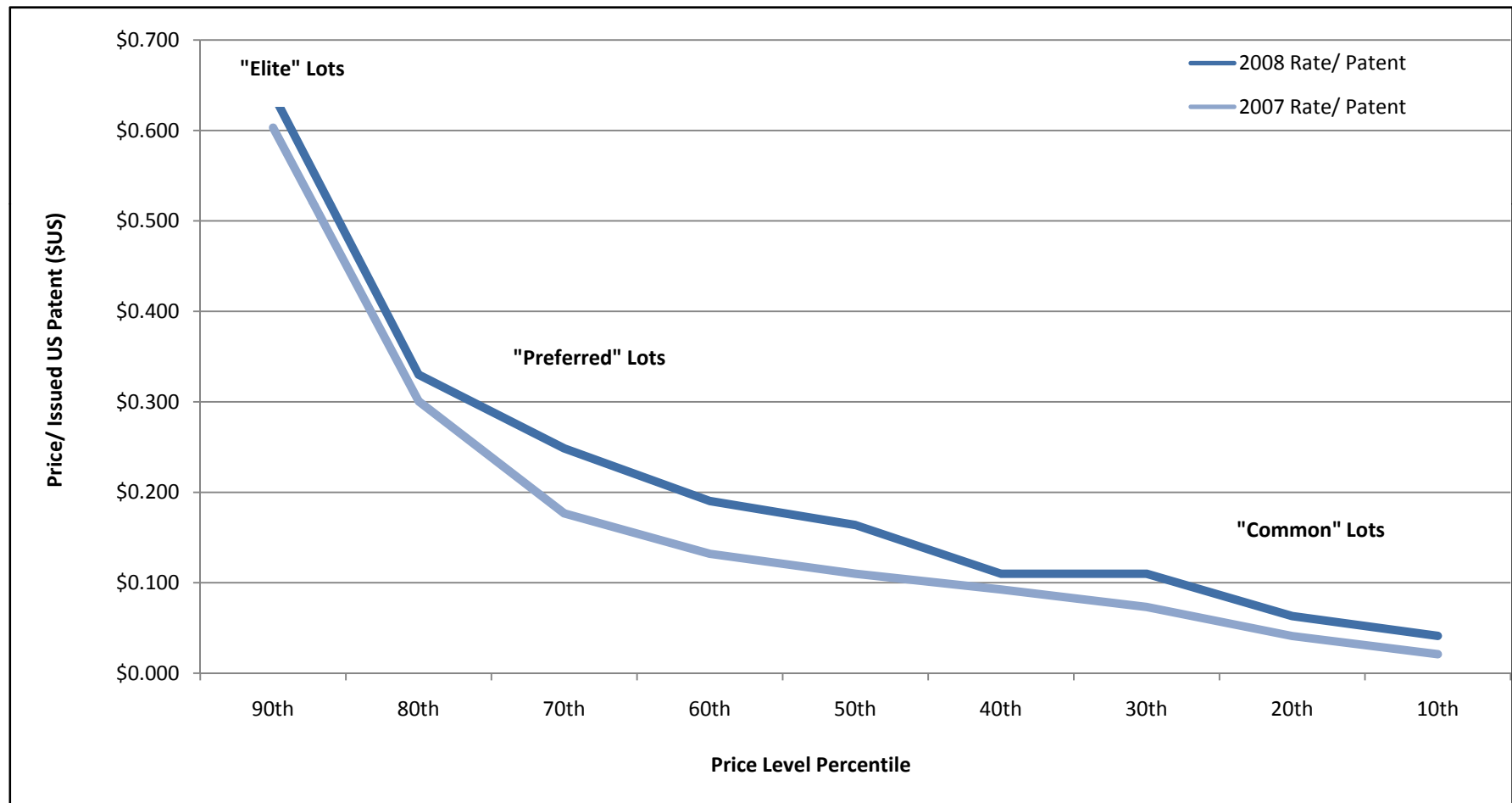
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Those engaged in the divestiture or acquisition of patents require improved guidance in evaluating bids and asks, and in budgeting for acquisition and forecasting divestitures

– The Challenge –

- What is an *appropriate price* for a particular patent lot we are selling?

- What is an *appropriate bid* for a particular patent lot we are selling?

- How much should we *budget for a set of acquisitions*?

- How do we *forecast sales for our divestiture business*?

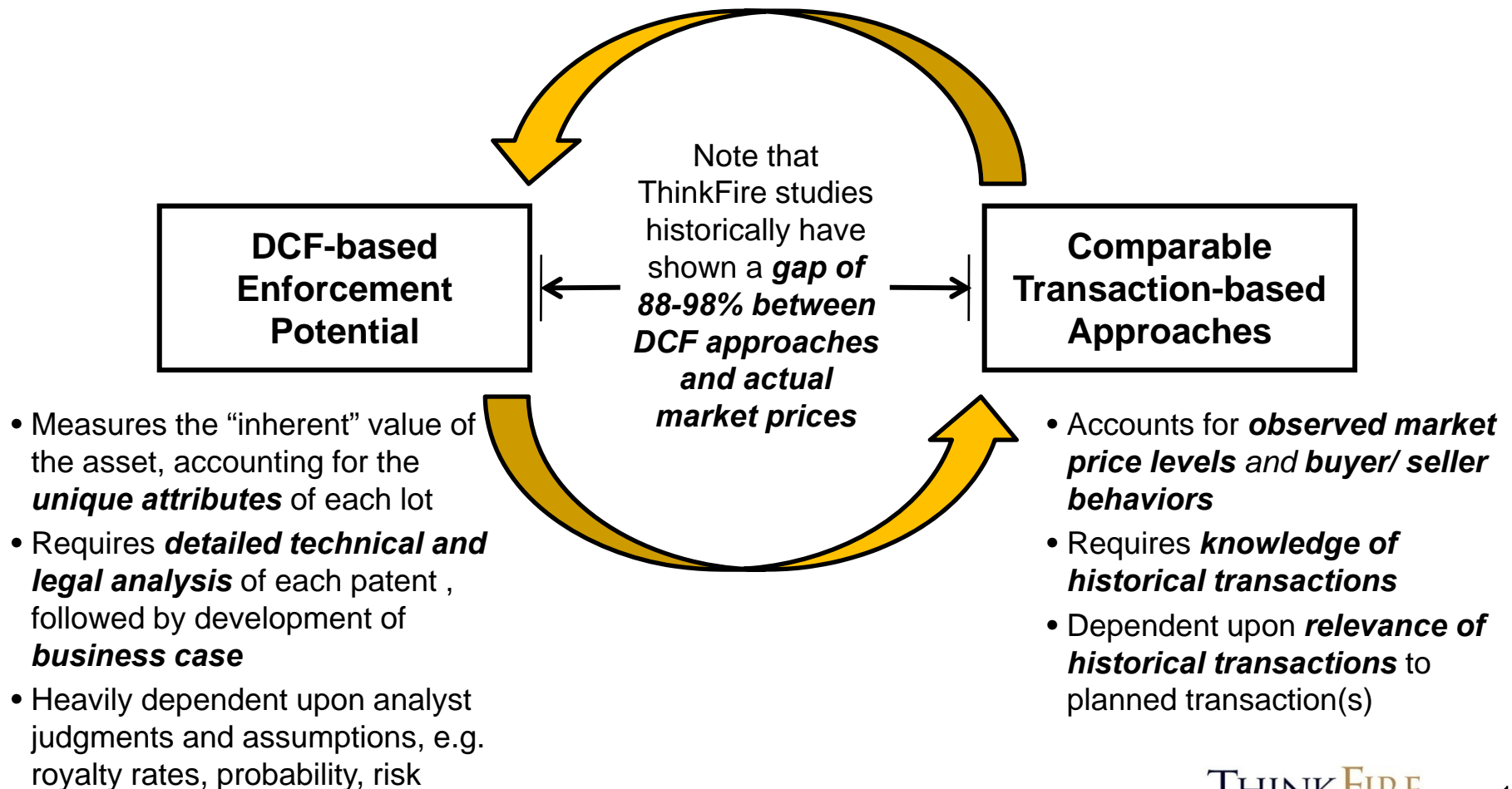There is a need for guidance in addition to or beyond that provided by typical valuation models based upon Discounted Cash Flow (DCF) analysis
- Helpful in *grounding DCF models in "reality"* to better triangulate on target prices
- Useful in *assessing entire acquisition or divestiture businesses* before detailed analysis of individual patents and DCF are possible

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Comparables are NOT a substitute for DCF, but rather a complement when both are available, and an alternative option when DCF is not practical

– DCF and Comparables- Perhaps the 2 Most Popular Valuation Techniques –

DCF-based Enforcement Potential

Note that ThinkFire studies historically have shown a *gap of 88-98% between DCF approaches and actual market prices*

Comparable Transaction-based Approaches

- Measures the "inherent" value of the asset, accounting for the *unique attributes* of each lot
- Requires *detailed technical and legal analysis* of each patent , followed by development of *business case*
- Heavily dependent upon analyst judgments and assumptions, e.g. royalty rates, probability, risk

- Accounts for *observed market price levels* and *buyer/ seller behaviors*
- Requires *knowledge of historical transactions*
- Dependent upon *relevance of historical transactions* to planned transaction(s)

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To successfully use comparables analysis as part of a valuation methodology, one must have an appropriate set of transaction data upon which to build

– *The Process* –

1. Determine comparable transaction *attributes*:
   - <u>Intrinsic attributes</u>:   Technology, related products/ services
   - <u>Formal attributes</u>:   Quantity, foreign filings, type of asset(s)
   - <u>Market attributes</u>:   Timing, Supply/ demand in the marketplace, circumstances of relevant buyers/ sellers, payment specifications, timing

2. Collect transaction data with relevant attributes

3. Analyze transaction data to select comparable transactions
   - *Normalize* for items not expected to be part of the normal course of business
   - An art not a science- use *judgment*

4. Use selected comparables to *derive implied valuation* range

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To successfully use comparables analysis as part of a valuation methodology, one must have an appropriate set of transaction data upon which to build

– The Data –

- To use *individual deal comparables*:
  - *A few* sufficiently comparable individual transactions

  - A *sufficient understanding of the circumstances* involved in each comparable

- To use *aggregate deal comparables*:
  - A *database* containing a significant quantity of individual transactions

  - An understanding of *how your transaction(s) relate* to those in the database

With these ingredients, one can then consider how one's planned transaction(s) fit into the context of the candidate comparable transactions
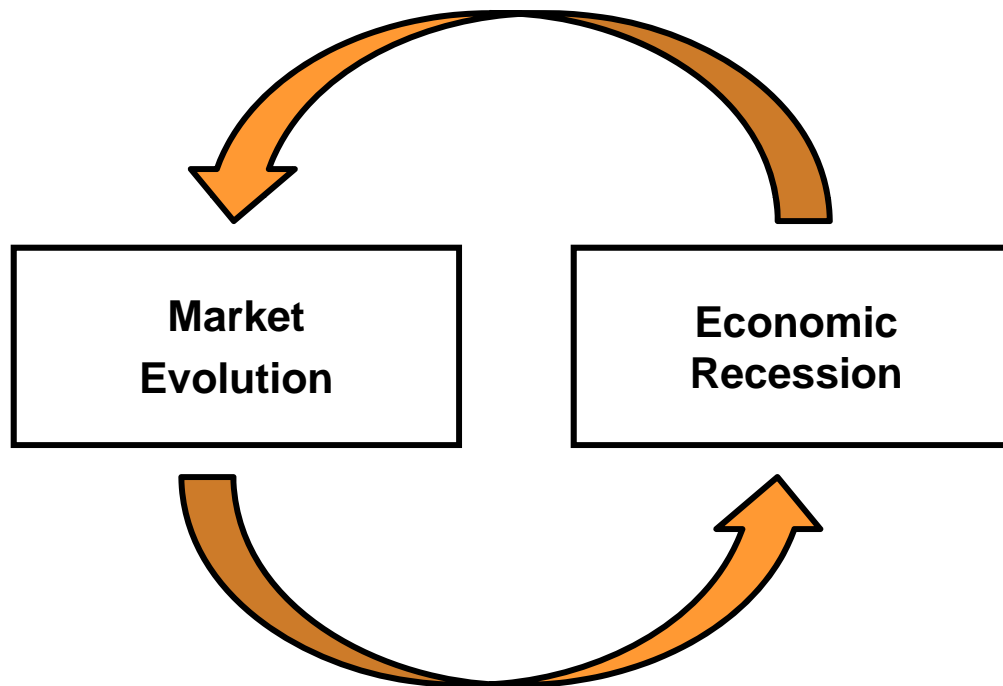- *How is your deal(s) similar* to the candidates?
- *How is your deal(s) different*?

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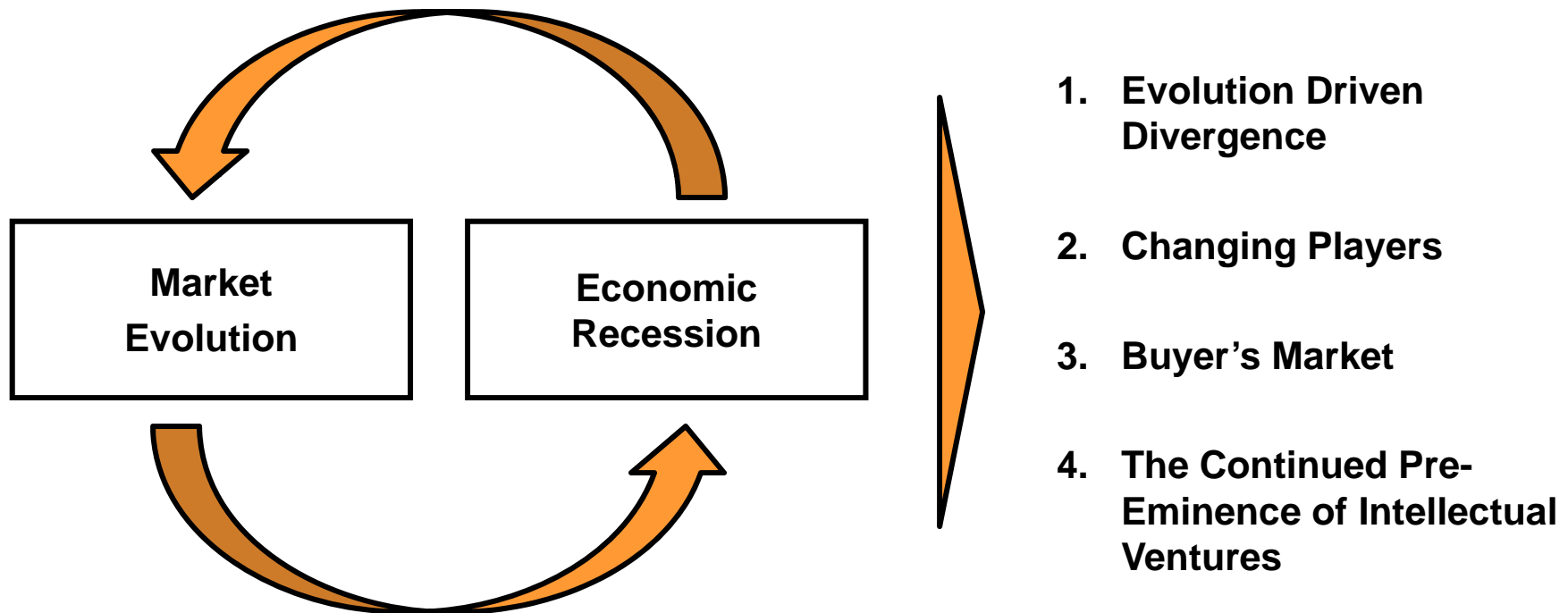- Questions

We see two dynamics driving the future of the patent transaction market

– Two Key Dynamics –

These two dynamics drive four key trends going forward

– Four Key Trends Going Forward –

Market Evolution

Economic Recession

1. **Evolution Driven Divergence**

2. **Changing Players**

3. **Buyer's Market**

4. **The Continued Pre-Eminence of Intellectual Ventures**

We see the industry players separating into four classes based upon differing levels of sophistication

– Diverging Types of Firms –

Sophisticated

Focused on performing significant transactions frequently

Evolving

Committed, pro-active, building capabilities

"We did a few deals in 2008 and had a number in our plan, and we will build on that and make divestitures a much bigger part of our business plan for 2009."

- Senior IP Executive, Large High Technology Company

Ad Hoc

Reactive; occasionally pursue transactions

"I take them seriously- I always think 'this could be the one'."

- Senior IP Executive, Large High Technology Company

Inactive

Out of the market

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Moving forward, firms must weigh "build vs. buy" options

– Build vs. Buy –

How Will You Leverage the Market?	• Acquisitions • Divestitures
Are Potential Partners Available?	• Aligned with your objectives? • Appropriate capabilities? • Viable economics?
Build vs. Buy?	

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– Please Feel Free to Contact Us With Any Questions –

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