

# Introducing New Economic Indexes

With Particular Reference to the Used Car Industry

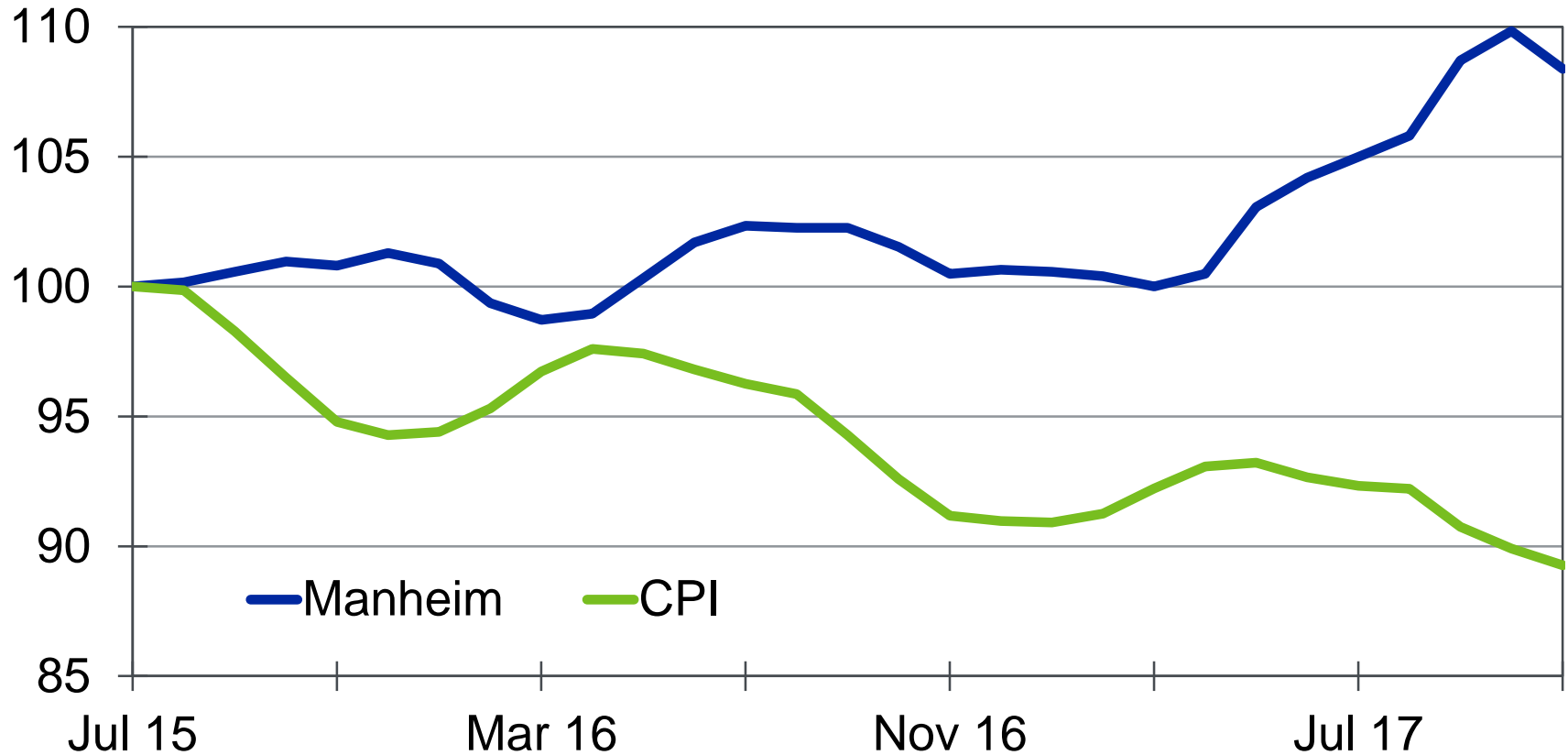
**TONY HUGHES**, Managing Director

# Moody's Analytics' Experience in Data Development

- » We construct forecasts and stress scenarios for a wide array of industry data.
- » We maintain regional data, and construct forecasts for the Case-Shiller house price index in the U.S. We partner with Core-Logic to develop Australian home price indexes.
- » We partner with Equifax to provide data on retail credit performance at a highly detailed level for all U.S. regions – CreditForecast.com.
- » We help construct the ADP Employment Report, which seeks to predict U.S. monthly jobs numbers before they are released.
- » We provide forecasts and stress scenarios of used vehicle residuals at a 10-digit VIN level.
- » Today I will concentrate on the fascinating world of used car prices!

# Manheim and CPI Diverging Sharply: Which Is Right?

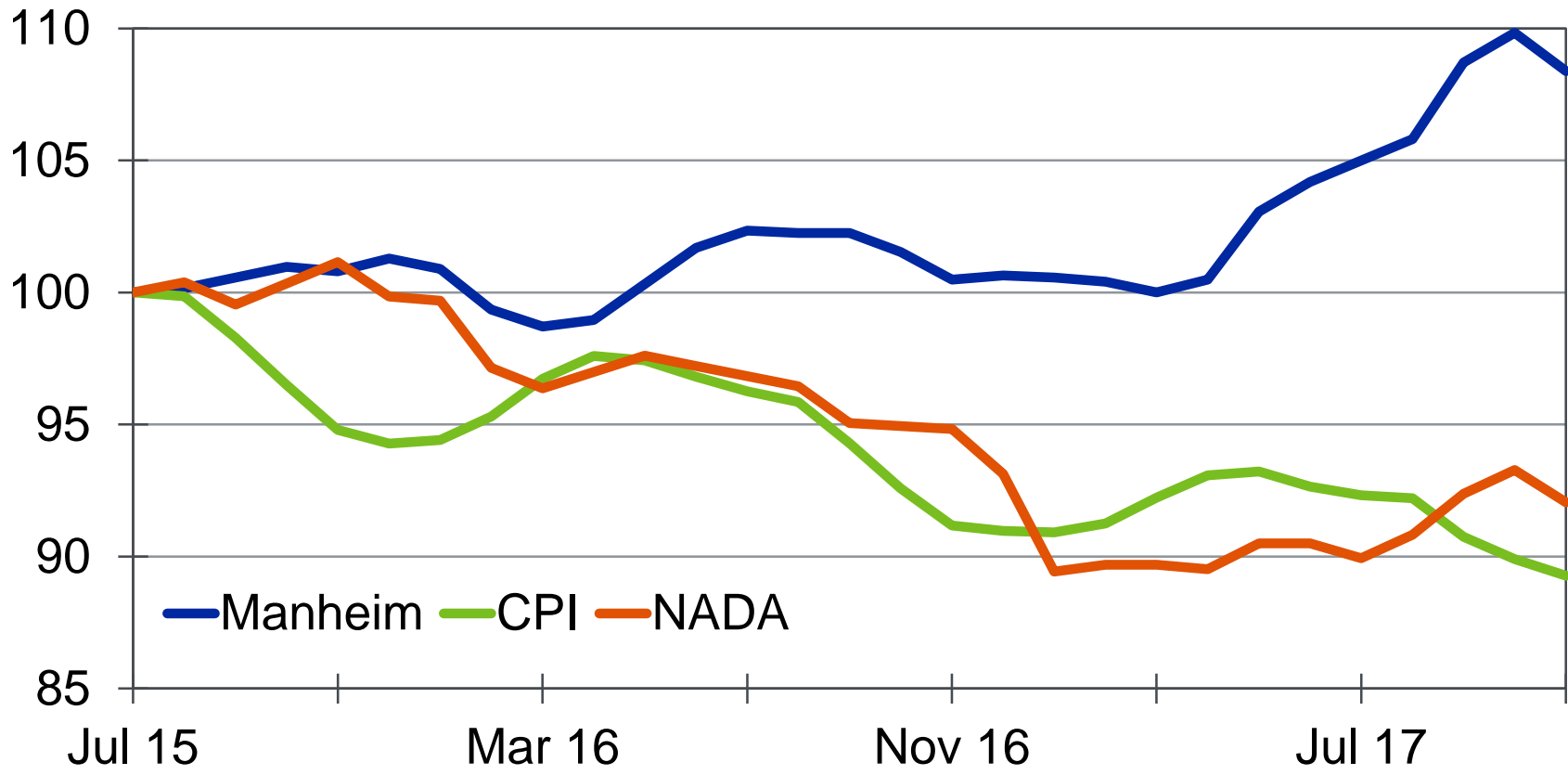
Index, July 2015 = 100



Sources: BLS, Manheim, Moody's Analytics

# Leading Industry Indexes Broadly Corroborate the CPI

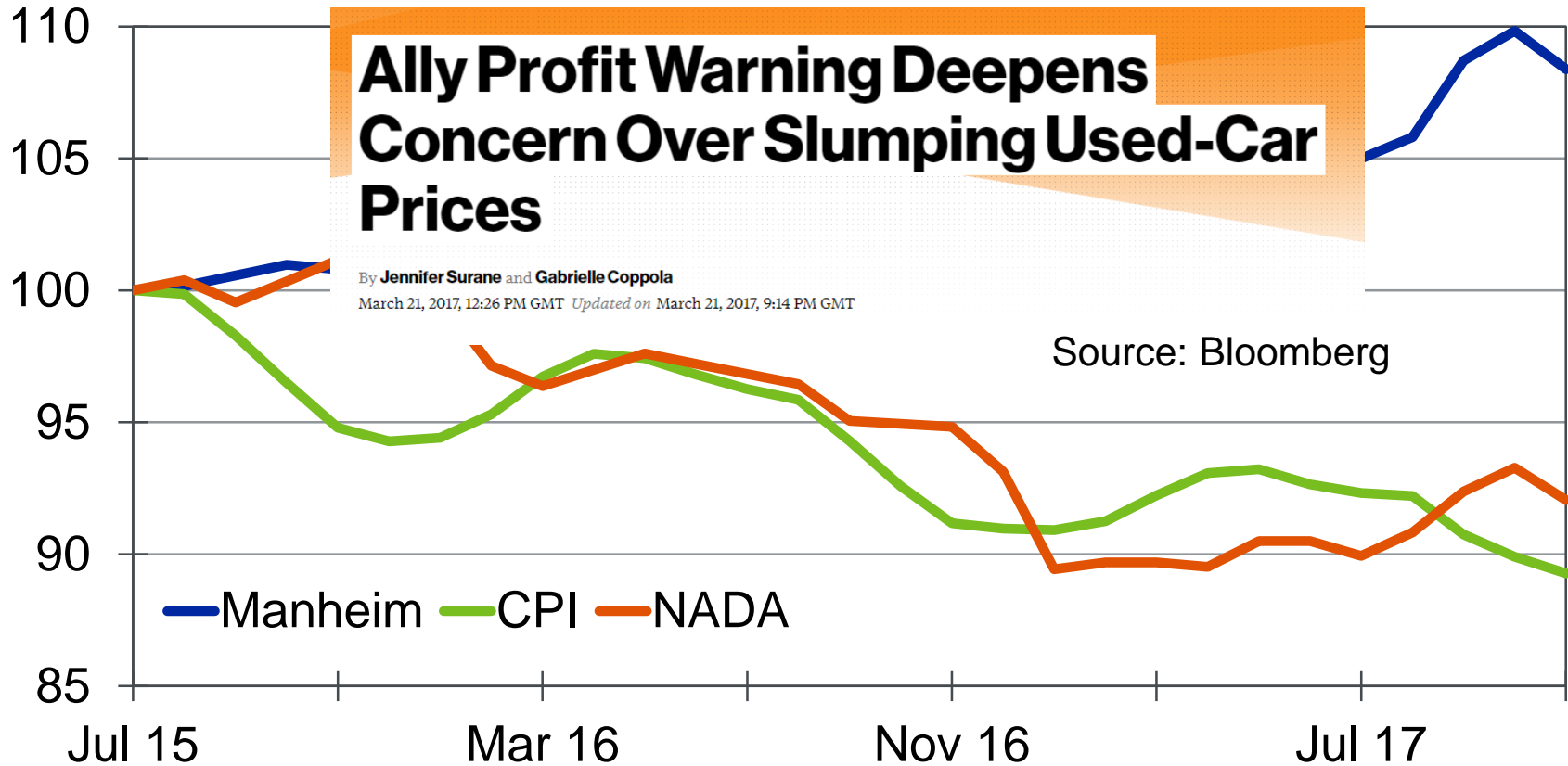
Index, July 2015 = 100



Sources: BLS, Manheim, NADA, Black Book, Moody's Analytics

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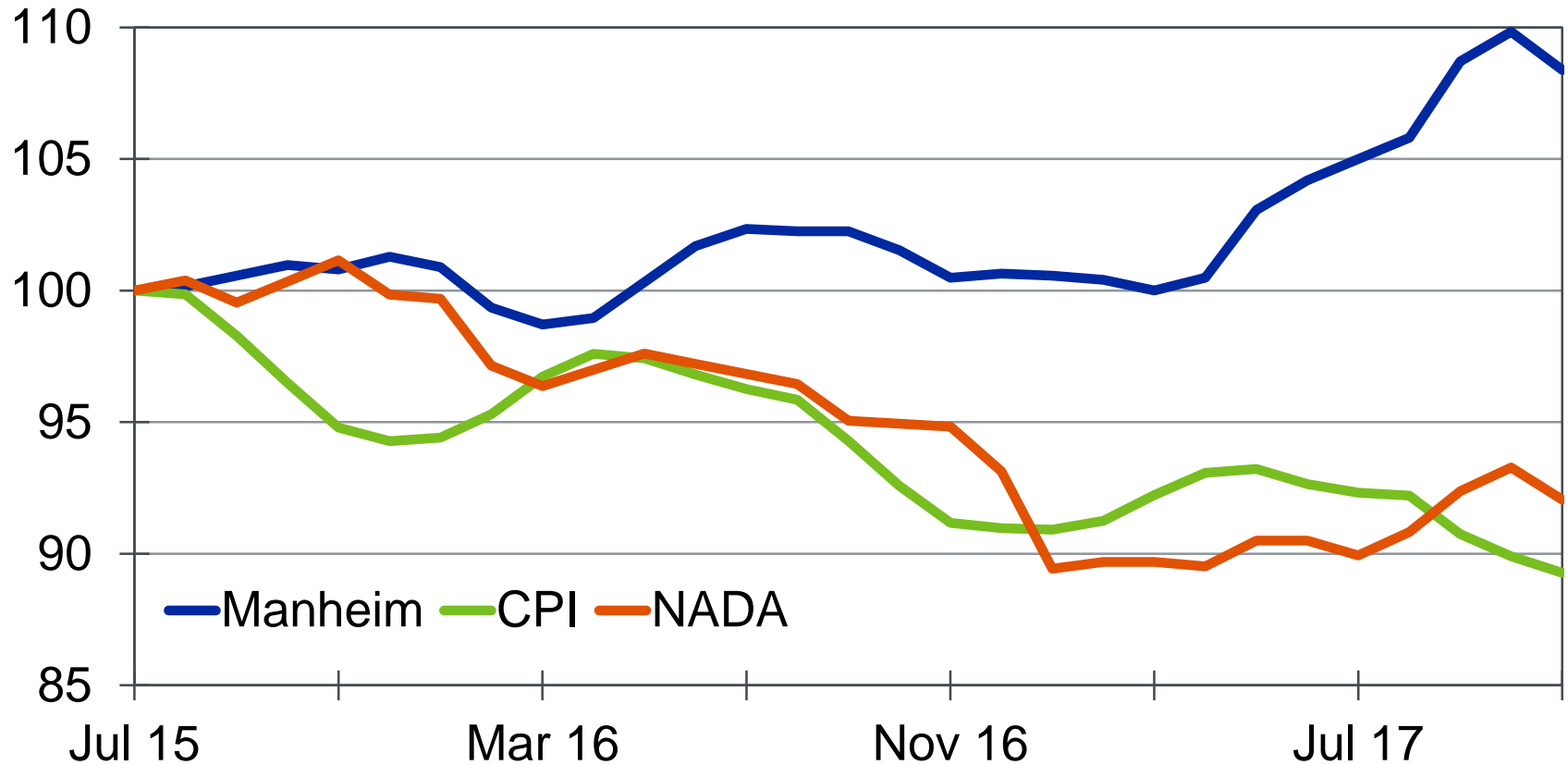
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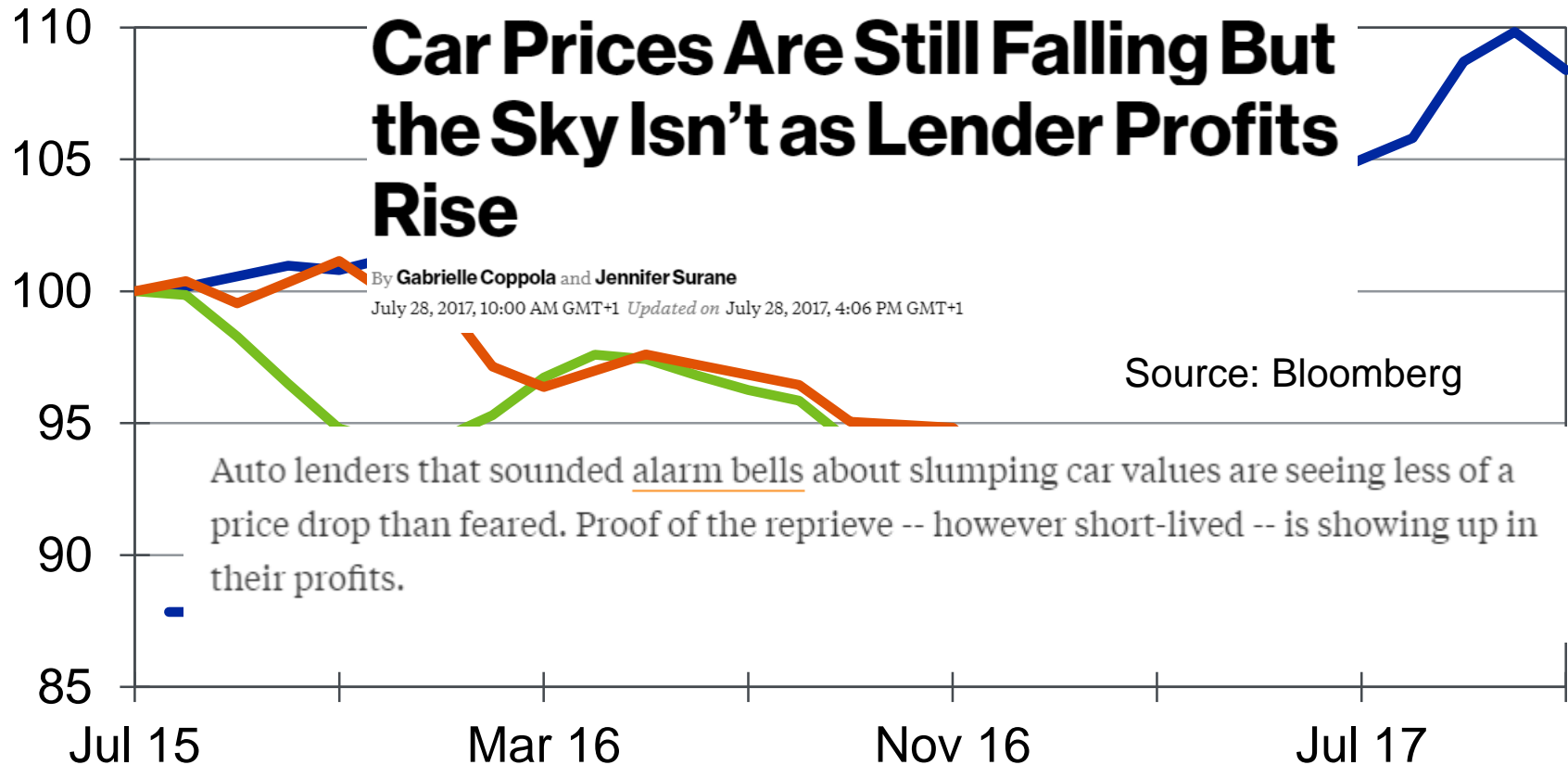
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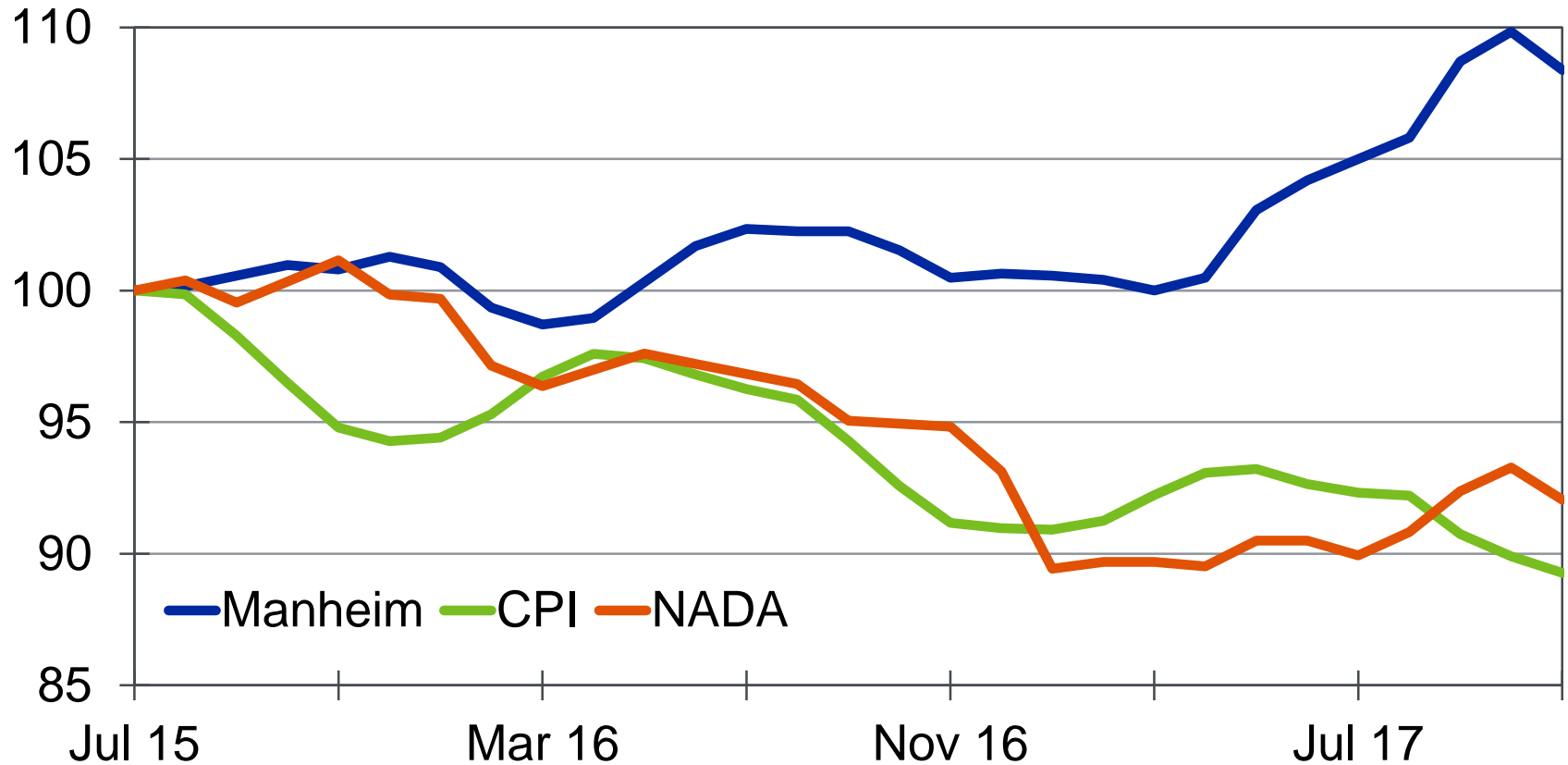
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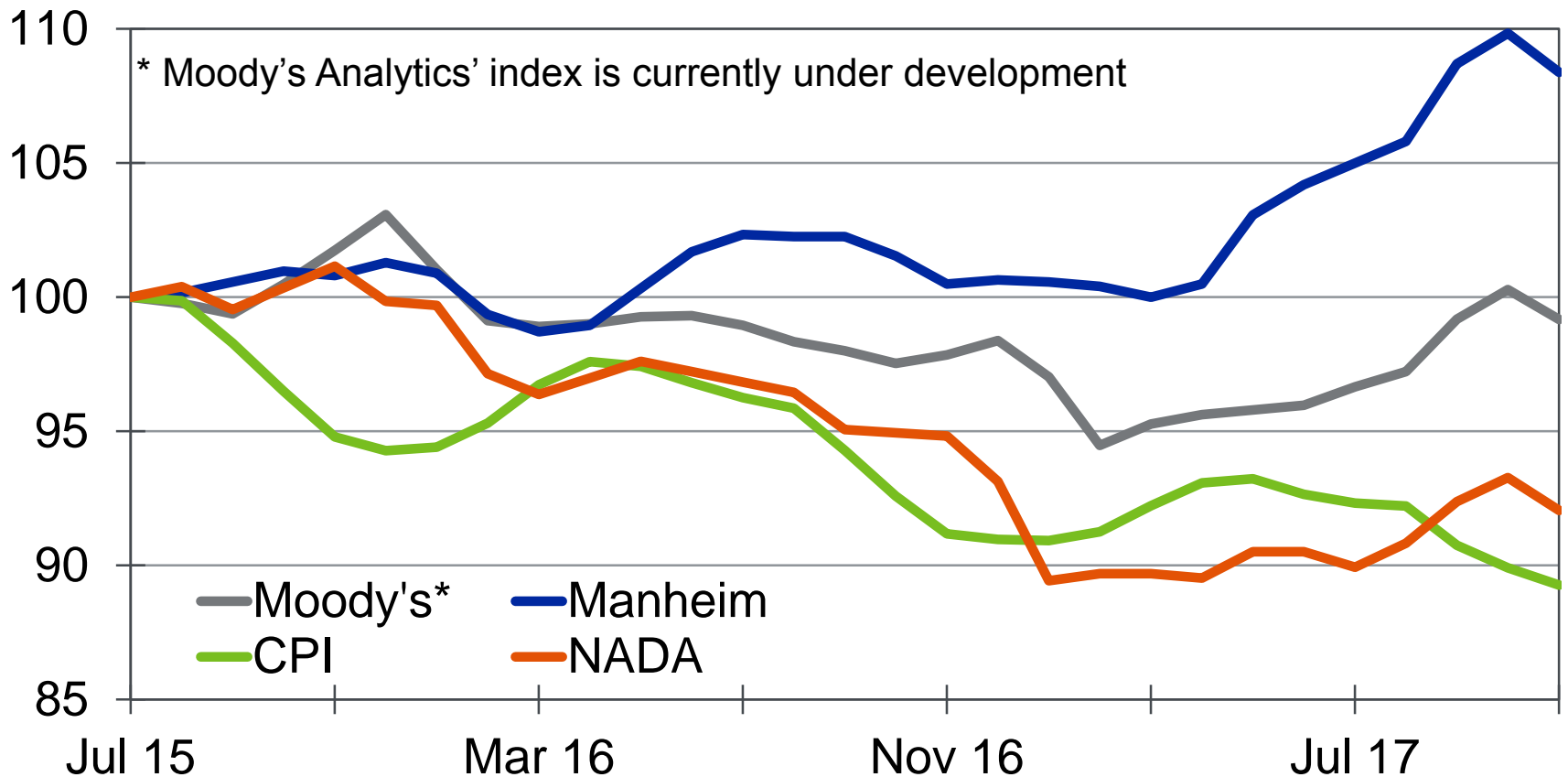
Index, July 2015 = 100



Sources: BLS, Manheim, NADA, Moody's Analytics



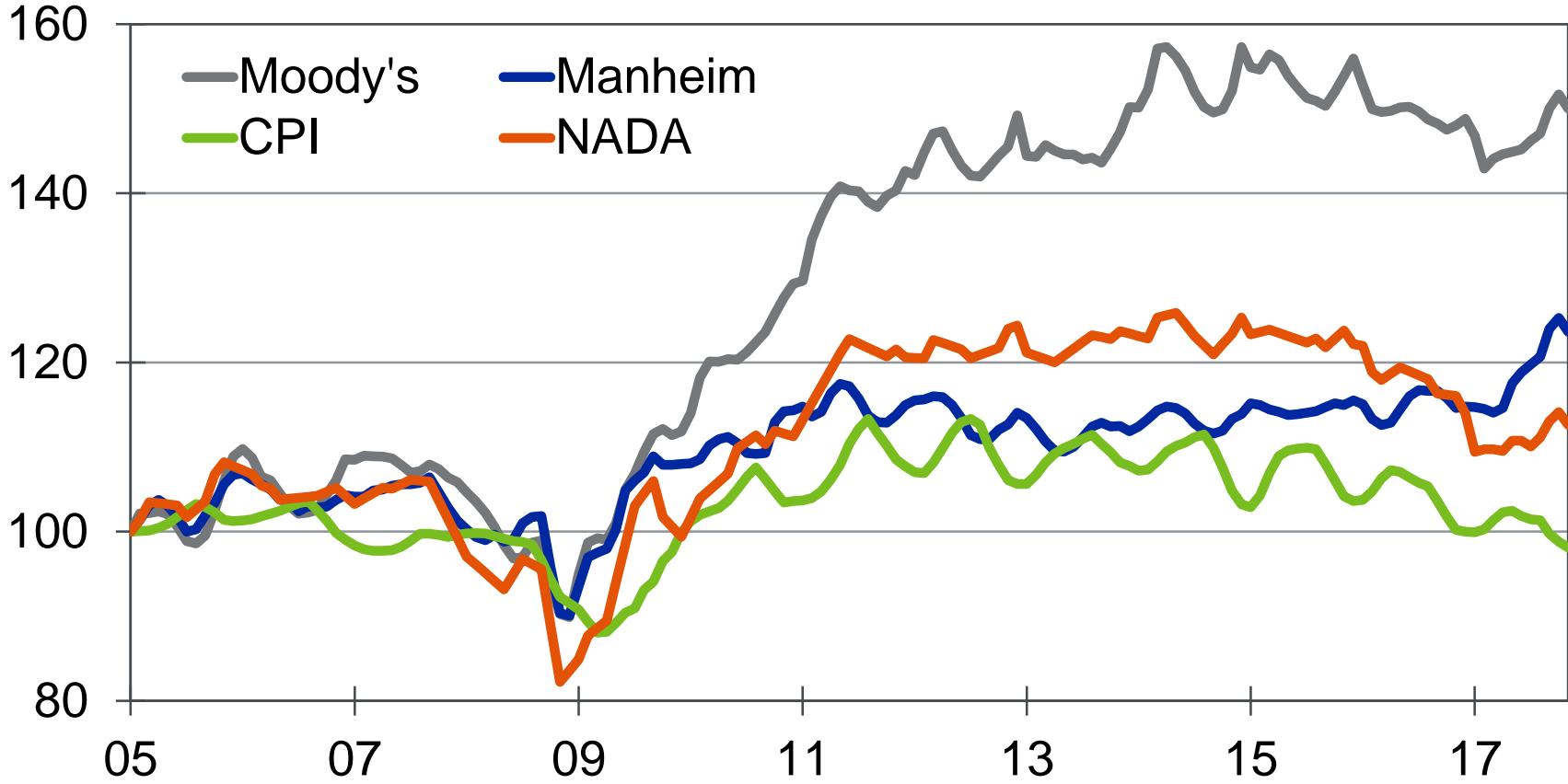
# Moody's, Based on Hedonics, Charts a Middle Ground Index, July 2015 = 100



Sources: BLS, Manheim, NADA, Moody's Analytics

# Moody's Index Gives More Force to Post Recession Surge

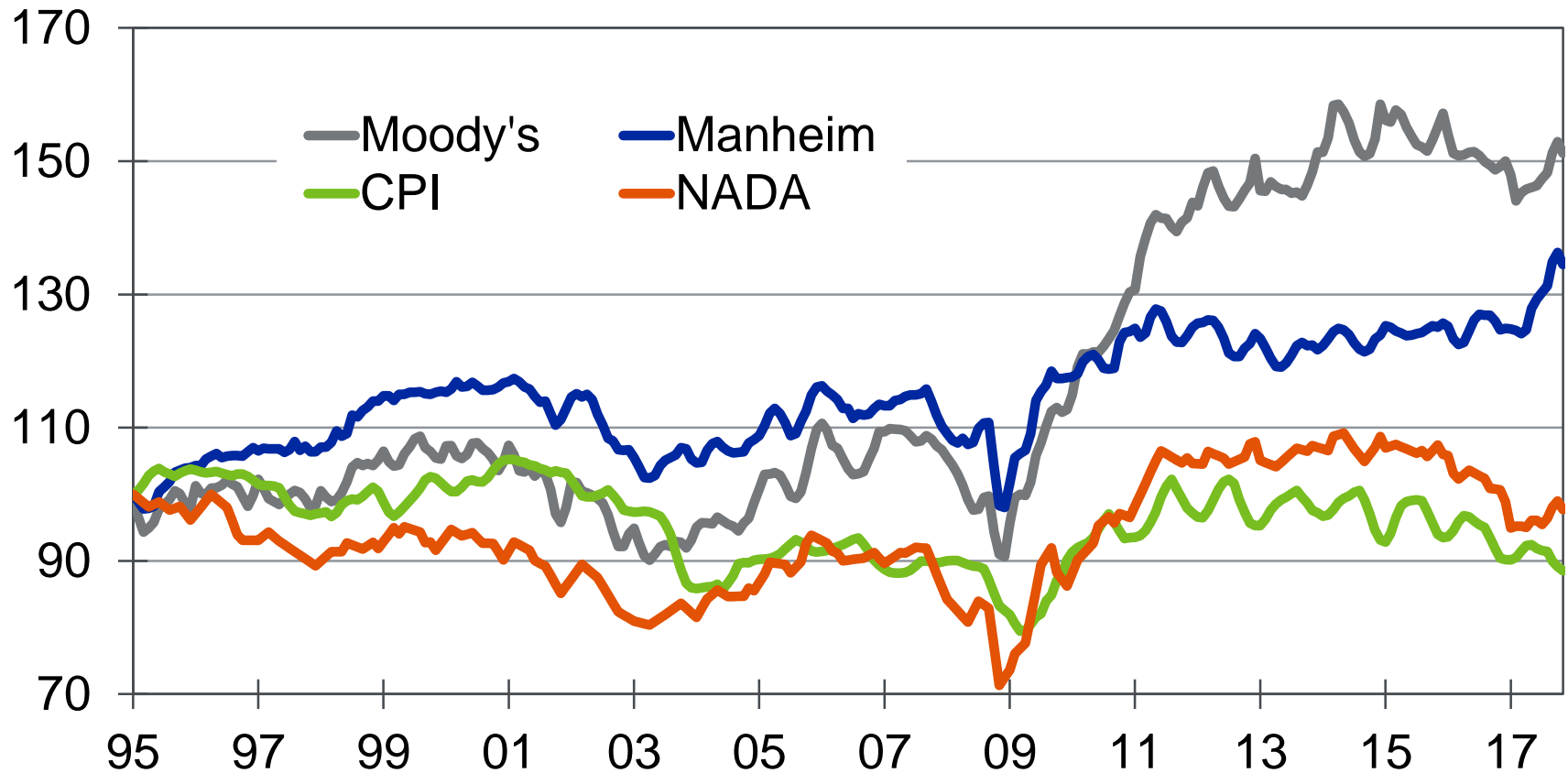
Index, Jan 2015 = 100



Sources: BLS, Manheim, NADA, Moody's Analytics

# Manheim Performs Pretty Well Over the Long Haul

Index, Jan 1995 = 100



Sources: BLS, Manheim, NADA, Moody's Analytics

# A Few Notes Used Car Price Indexes

- » In tracking car prices lately, all major indexes have provided a useful signal.
- » The Manheim has been too optimistic – prices have been falling. Followers of the Manheim would have avoided the abject pessimism demonstrated by others in the industry.
- » Established indexes that move markets (like the Manheim & NADA) should be consistently maintained. Changing them risks losing a useful signal.
- » A new index should add to the story, cover something other indexes don't. If the new index is trustworthy, it will gain currency, it will move markets.
- » Old indexes that do not move markets are irrelevant and can be killed.
- » A new index may be based on “Big Data”. Such sources should, if they are useful, be eroding the market moving potential of “Small Data” based indexes.

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