GM PLANT SHUTDOWNS: FISCAL AND ECONOMIC AFTERMATH

what does REMI say? sm

Presented by Harry Walsh
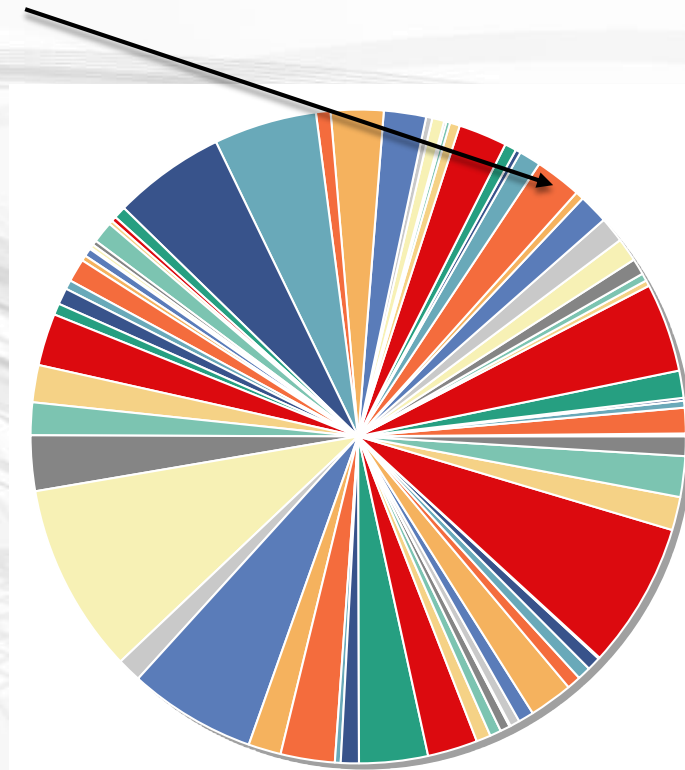**Regional Economic Models, Inc.**

Overview

- Background of automotive industry in US

- Description of GM plant shutdowns
  - What we know
  - Unanswered questions

- National results of the shutdowns

- Modeling potential state scenarios using REMI

Background:
US Auto Manufacturing

□ Share of National Output

❑ *Motor vehicles, bodies and trailers, and parts manufacturing*– 2.3% (721B Fixed 2016$)
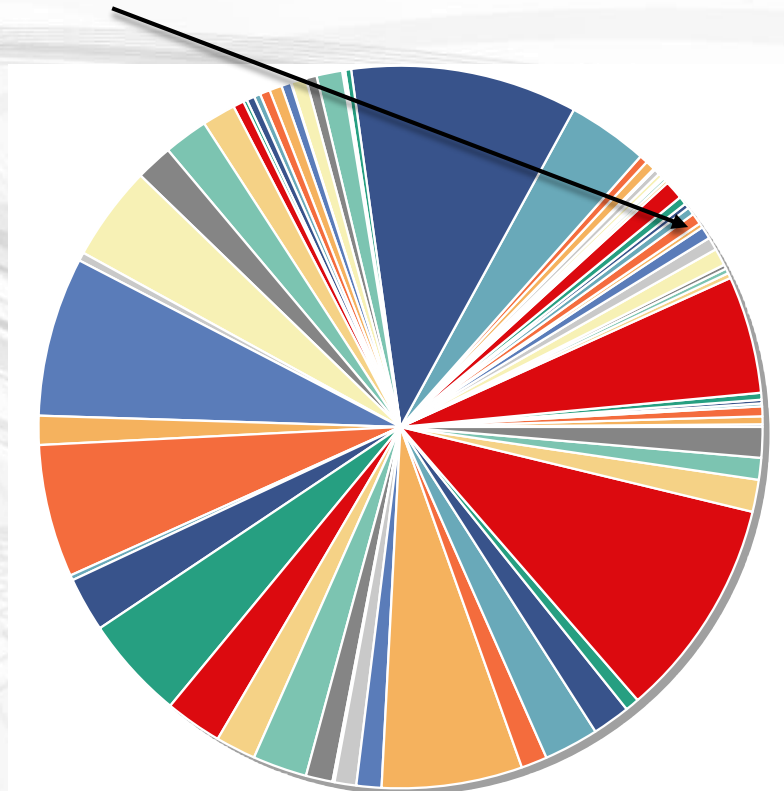

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Background:
US Auto Manufacturing

□ Share of National Employment

    □ *Motor vehicles, bodies and trailers, and parts manufacturing*– 0.5% (~980,000)
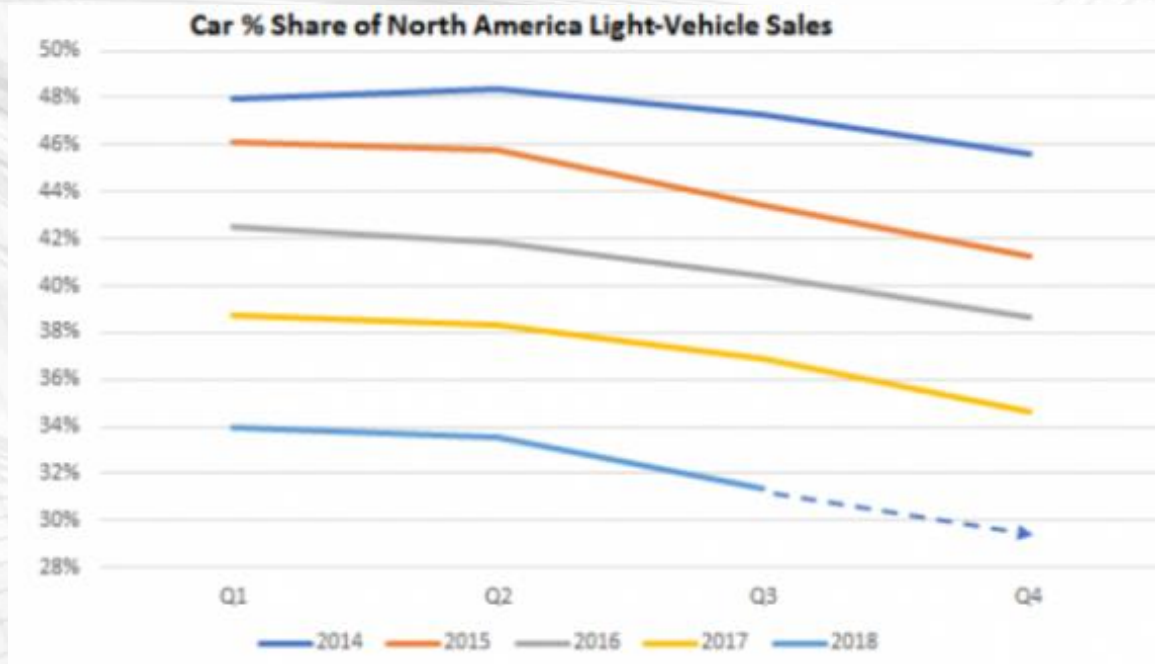
Background:
US Auto Manufacturing

- Location Quotient for Employment
  - *Motor vehicles, bodies and trailers, and parts manufacturing*
    1. **Michigan – 6.36 (~180k)**
    2. Indiana – 6.21 (~121k)
    3. Kentucky – 5.05 (~65k)*
    - *(6th)* **Ohio – 3.11 (~112k)**

Background:
US Auto Manufacturing

□ Light-Vehicle sales overall have been flat at 17.5M units, but car sales have been steadily declining

Car % Share of North America Light-Vehicle Sales

Image: Wards Intelligence, Haig Stoddard 10/8/18

GM: Financial Outlook

- Declining small car & sedan sales
  - Threatens revenue stream for the short-to-medium run

- Corporate Tax Cuts enacted last year saved General Motors **$157 M**
  - GM revenue YTD 2018 is still **$1.7B** behind YTD 2017
    - *General Motors Sept '18 Condensed Financial State of Operations*

- US Tariffs
  - Steel and aluminum are major inputs to motor vehicle manufacturing
  - Indirect reason for shutdown, though main claim is reshaping production for the future

Sources: Business Insider, Autonews.com, New York Times, General Motors

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GM: Shutdowns

GM Targets Five Factories for Closing

❶ Oshawa Chevrolet Impala; Cadillac XT5

❷ Warren Propulsion plant

❸ Hamtramck Chevrolet Volt, Impala; Buick LaCrosse; Cadillac CT6

❹ Lordstown Chevrolet Cruze

❺ White Marsh Propulsion plant

Source: Bloomberg reporting

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GM: Shutdowns

- General Motors announced plans to halt production at five North American factories:
  - Detroit-Hamtramck Assembly (MI) – over 1,500 workers
  - The Lordstown Assembly (Ohio) – over 1,600 workers
  - Baltimore Operations & Warren Transmission Operations (MD & MI) – combined 645 workers
  - Salaried staffing cuts across North America – 8,000 white-collar workers

  - *Oshawa Assembly (Ontario, Canada) – over 2,500 workers*
    - *(We will not be including this in analysis, but still important to note)*

GM: Shutdowns

□ GM Chairman and CEO Mary Barra on their surprise announcement:

▪ "The actions we are taking today continue our transformation to be highly agile, resilient and profitable, while giving us the flexibility to invest in the future"

Image: Bill Pugliano/Getty Images News/Getty Images

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GM: Reactions to Shutdowns

□ United Auto Workers (UAW) said the move "will not go unchallenged"

□ Unionized employees must be placed at similar location within 50 miles

□ GM is attempting to "ease transitions" but does not see a way to follow through on contract

  ❑ Potential national strike of auto workers in 2019

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Detroit Free Press 12/14/18

GM: Reactions to Shutdown

- "[GM] better put something else in!"
  - *President Donald Trump*

- "Corporate greed at its worst."
  - *Sen. Sherrod Brown (D-OH)*

- "[GM shutdowns] will have a profoundly damaging effect on American workers and families"
  - *Brenda Lawrence (D-MI)*

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Sources: Detroit Free Press, ABC7 WXYZ, Washington Post

GM: Potential Issues

- Transitioning ex-employees into new positions
  - Factory workers face different issues than salaried corporate staff

- Revenue impacts
  - Lessened personal consumption expenditures
  - Some level of population decrease is likely

GM: Unknowns

- ☐ Is this truly an 'idling'?
  - ◻ When and who will GM hire?
  - ◻ What happens to the factories & associated machinery?

- ☐ Where will the ex-employees go?
  - ◻ Will they stay in their metro area? Their states?
  - ◻ Will they need retraining?

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Modeling: National Impact

- REMI 51-region, 70-sector PI+ model of 50 States & DC v.2.2

- With effect in 2019:
  - Decrease in Industry Employment - Motor vehicles, bodies and trailers, and parts manufacturing
    - Ohio, Michigan & Maryland
  - Decrease in Industry Employment – Professional, scientific, and technical services & management of companies
    - Spread across 20 GM headquarters

Modeling: Hypothetical Scenario

□ REMI 1-region, 70-sector Tax-PI model of Illinois v2.2 using Michigan's state budget

□ With effect 2019-2027

1. GM Closure with balanced budget assumption

2. GM Closure with demand-driven budget (surplus & deficit allowed)

Model Results

Let's open up the pre-run models