Ellen Hughes-Cromwick

CHIEF GLOBAL ECONOMIST

Chief economist who advised senior management of a Fortune 500 Company on global economic, financial, and strategic issues; provide briefings and analysis of global outlook and implications for business planning; gave over 20 speeches per year to stakeholders and customers; past president of National Association for Business Economics (2,400 members); Ph.D. Clark University and B.A. from the University of Notre Dame; strong focus on working together and transparency. Areas of expertise:

- Global business environment
- Fiscal and monetary policy analysis
- Interest rate, credit, and risk management
- · Emerging market growth attributes

- US climate and clean energy policy
- Economic policy impacts on auto sector
- Exchange rates, commodity analysis and hedging
- Alternative scenario development

EXPERIENCE

THIRD WAY Washington, DC Senior Resident Fellow

Position focuses on providing insight and analysis on building climate policy solutions that are fair, equitable, and expand economic opportunities for American workers: developing communications and working with policy team to promote transition to electrified transportation as well as effective and fair workforce development in a clean energy future; project leader for competitiveness study of 10 clean energy technologies.

ENERGY INSTITUTE UNIVERSITY OF MICHIGAN Ann Arbor, Michigan

Associate Director and Senior Economist

July 2017 – September 2019 Appointment to conduct energy economics research and analysis, with a specific focus on energy efficiency associated with future mobility technology in the areas of electrified, connected, and autonomous vehicles. This appointment includes professional engagement and support for student activities.

U.S. DEPARTMENT OF COMMERCE

Washington, D.C. Chief Economist

November 2015 - January 2017 Appointment to the position of Chief Economist to lead a talented team on initiatives pertaining to improving the quality, scope, and timeliness of economic statistics; advise the Office of the Secretary of the Commerce Department on a broad range of domestic, international, and economic policy issues; participate in Administration's assessment of economic conditions and outlook.

ROSS SCHOOL OF BUSINESS UNIVERSITY OF MICHIGAN Ann Arbor, Michigan Adjunct Professor

Appointment to teach Global Business Environment and World Economy, Executive MBA and BBA Programs

FORD MOTOR COMPANY

Dearborn, Michigan

Director and Chief Global Economist

Report to CFO and manage a global group of economists in the corporate economics and strategic issues office within the Global Finance organization. Lead corporate business planning teams to develop 10-year forecasts of market size and growth, auto industry revenue and pricing. Identify risks and opportunities associated with competitive and external environment.

- Provide advance signals for automotive sector performance, contributing to strategic and production planning
- Ford Award for development of industry model (internal patent) used to recommend capital spending project
- Communicate implications of business environment for operations' risk assessment
- Developed "green bond" concept for funding alternative technologies
- Member of company's business strategy steering team, portfolio strategy group, and adviser to global risk management committee; member of global capacity planning team
- Internal advisor for cash management; high level contacts with central bankers, government officials, economic experts, media, and investment bank analysts

October 2019 - present

January – December 2015

1996 - 2014

2004 - 2014

FORD MOTOR COMPANY

Director

Reported to Group Vice President for Corporate Affairs and Chief Economist: manager of corporate economics and strategic issues office. Responsibilities included oversight of economic, interest rate, exchange rate and industry analysis and forecasting. Managed development of worldwide business planning industry volumes and forecasts to support product planning and capital allocation. Initiated office coverage of health care industry analysis to support finance and benefit design to achieve total value management targets.

Corporate Economics Manager	1999 - 2004
Senior Economist	1996 - 1999
MELLON FINANCIAL CORPORATION Pittsburgh, Pennsylvania	1990 - 1996

Senior Economist

Primary responsibilities included the U.S. monthly macroeconomic forecast and industry analysis. Provided consulting on business conditions, pricing, end market trends and industry issues to banking clients directly and to management; expanded analysis to cover Latin America markets for middle market clients.

TRINITY COLLEGE

Hartford, Connecticut

Assistant Professor, Economics Department

Taught Basic Economic Principles, Macroeconomic Theory, and Business Cycle Analysis. Won grant from the Sloan Foundation and IBM to disseminate computing applications for Intermediate Macroeconomics to three neighboring institutions. Project co-director for Sloan Foundation grant which awarded \$60,000 for project expenses, IBM granted approximately \$2 million of computing equipment and software.

COUNCIL OF ECONOMIC ADVISERS (CEA)

Executive Office of the President, Washington, D.C. Staff Economist

After starting as junior staff economist for the first year, promoted to staff economist for a second year at CEA; undertook U.S. macroeconomic analysis and forecasting to support "Troika" process (CEA, OMB, Treasury) and assumptions underpinning U.S. federal budget.

SELECTED SPEECHES and PUBLICATIONS

- NABE Webinar on U.S. Competitiveness of Clean Energy Technologies, April 2023 .
- Challenges and Opportunities in Electrifying Transportation, Climate Mitigation Initiative, May 2023
- Battery Economics and Electrified Vehicle Scenarios, March 2019
- Future of Michigan's Economy, Detroit Economic Club, January 2018
- Regional Economic Growth, Regional Chamber of Commerce, November 2017
- Global Economic Conditions, Michigan Economic Society, September 2017
- Commencement Address, B.A. and B.S. in Economics, University of Michigan, April 2016
- Drivers of Inflation and Interest Rates, Barclays 19th Annual Inflation Linked Conference, June 2015
- Perspectives on Global Economy, Birmingham Economic Club, May 2015
- Secular Stagnation Panel, American Economic Association Annual Meeting, January 2015 •
- Emerging Market Business Cycles and Policy Dynamics, March 2014
- Latin America Economic Outlook, Americas Summit, February 2014
- Northern Trust Senior Leadership Presentation, June 2013
- U.S. Economic Performance, Swedbank Conference, Copenhagen, October 2012
- Perspectives on U.S. Economy and Financial Markets, Harvard Joint Center Advisory Board, June 2010
- Global Financial Crisis and Implications for the U.S. Economy, Center for American Progress, January 2009
- Credit Market Developments: Implications for Global Economy, New York Business Economics Club, June 2008

EDUCATION

Clark University, Worcester, Massachusetts, Ph.D., Economics; M.A., International Development, 1986-1988 University of Notre Dame, Notre Dame, Indiana, B.A. Government and French Language 1977

HONORS AND AWARDS

Certificate for Business Economics (CBE) Designation, 2015 Special Recognition for input to Ford Motor Company's Board of Directors Strategy Offsite, 2003 Award from President Reagan for Improving Government Efficiency H.B. Earhart Graduate Fellow, Clark University Congressional Research Service Graduate Student Fellow

2002 - 2004

1987 - 1990

1985 - 1987

BUSINESS AND CIVIC AFFILIATIONS

Senior Policy Adviser, MacroPolicy Perspectives, LLC, 2017 - present Board of Trustees, Clark University, 2017 – present Member, Board of Directors, NABE Foundation, September 2018 – present, Chair 2018 - 2021 Member, Industrial Economists Discussion Group (Harvard) Member, American Economic Association

Board of Directors (2011 - 2015) and Executive Committee Member, National Bureau for Economic Research Member, Conference of Business Economists 2000 – present; Chair 2013-2014 Global Fellow, Global Interdependence Center Board Member, Council for Economic Education 2013-2014 Member, Fiscal Future Committee, National Academy of Sciences, 2008-2010 President, National Association for Business Economics (NABE), 2007-2008 Member, Congressional Budget Office Advisory Panel, 2005-2007 Chair, Board of Directors, Operation ABLE, 2007-2008

Presentations, Publications, and Work Products

Presentations 2006 to present

Dr. Hughes-Cromwick gave approximately 50 internal and external presentations each year during her 18-year tenure at Ford Motor Company, one year at the Ross School of Business, University of Michigan, and during her 14 months at the U.S. Department of Commerce. The topics included:

- Global economic outlook
- Industry trends and outlook
- Take-off stage of economic development and its consequences
- Commodities trends and outlook
- Monetary policy and financial conditions
- Retail spending and new vehicle outlook
- Commercial truck outlook
- Labor market fundamentals
- Financial crisis
- Consumer and business credit conditions and outlook
- Commercial real estate conditions and outlook
- BRICs and the fallacy of composition
- Exchange rate determination and outlook
- Inflation outlook and prospect for financial performance of inflation indexed products
- Federal Reserve exit strategy
- Obama Administration U.S. Economic Forecast

List of external organizations for presentations

- ACT (Commercial Truck Research and Consulting Firm)
- American Economic Association Annual Meetings (2011 and 2015)
 - 2015 panel included Glenn Hubbard, Dean of the Columbia University Graduate School of Business and Russell L. Carson Professor of Finance and Economics, Larry Summers, Professor Emeritus and Charles W. Eliot University Professor of Harvard University, and John Williams, President of the Federal Reserve Bank of San Francisco
- Autoline TV (John McElroy)
- Automotive Trade Policy Council
- Barclays Bank
- Board of Governors of the Federal Reserve System
- Boston Economic Club
- Center for American Progress
- Center for Automotive Research (CAR) Management Briefing Seminar
- Charlotte Economic Club
- China State Information Center
- Commerzbank
- Conference of Business Economists
- Council for Economic Education
- Dallas Fort Worth Association for Business Economics

- Detroit Association for Business Economics
- Federal Reserve Bank of Chicago Symposium
- Federal Reserve Bank of St. Louis Economic Forecast Luncheon
- Fidelity Investments Treasurers Conference
- Ford Motor Company Retired Engineers Club
- Fudan University, Shanghai, China
- Georgetown University MBA Program
- Global Interdependence Center
- Harvard Business School Alumni Club of Michigan
- Harvard Joint Center for Housing Studies Policy Advisory Board Meeting
- Hertz Company
- Houston Economic Club
- Houston Economic Development Annual Forecast Luncheon
- Irish American Business Chamber of Philadelphia
- Las Vegas Economic Club
- Los Angeles Association for Business Economics
- Mackinaw Policy Conference
- Mount St. Mary's College Presidential Award Ceremony
- National Association for Business Economics
- National Economists Club
- New York Association for Business Economics
- New York City Forecasters Club
- Northern Trust Business Leadership Council
- North Carolina RowanWORKS, Economic Development (Salisbury, NC)
- Organisation for Economic Co-operation and Development (OECD)
- Richmond Association for Business Economics
- San Antonio Economic Society
- Society for Automotive Analysts (SAA)
- Sheboygan Economic Club
- Southwest Economic Summit: The Americas 2014
- Swedbank Growth Days Conference
- Traverse City Economic Club
- University of California, San Diego, Executive MBA Program
- University of Michigan Economic Society
- University of Michigan Economics Department Commencement Address 2016
- University of Michigan Transportation, Energy, and Environment Conference Panel Participant 2016

Publications

In light of Dr. Hughes-Cromwick's years of service in the private sector, she has had less time to issue external, public facing publications. Her work products were focused in the areas of strategic planning (won a Ford award in 2003 for the Ford Board of Director's strategic offsite), vehicle demand modeling, business planning, exchange rate hedging, cash management, and the global economic outlook (10-year forecast horizon). A more complete list of these work products is included below.

External publications include:

Hughes-Cromwick, Ellen. Winter 2019. "How Government Data Support Business Decisions." Journal of Economic Perspectives.

Hughes-Cromwick, Ellen. 2009. "Economic and Financial Climate Change: A Business Economist's Perspective." *Business Economics:* (Volume 44, Issue 1): 17-22.

Hughes-Cromwick, Ellen. 2011. "Ford Motor Company's Global Electrification Strategy." *Business Economics:* (Volume 46, Issue 3): 167-170.

Hughes-Cromwick, Ellen and Joshua Cregger. 2013. "Financing Infrastructure to Support Alternative Fuel Vehicles: How Much Investment is Needed and How Will it be Funded?" Global Interdependence Center. Paper is posted at: <u>http://www.cargroup.org/?module=Publications&event=View&publD=100</u>

Dr. Hughes-Cromwick undertook quantitative and qualitative analyses and authored many internal publications at Ford Motor Company and the U.S. Department of Commerce (which included a weekly briefing to the Commerce Secretary and senior leadership team).

Ford Motor Company

During her career at the Company, Hughes-Cromwick produced applied economic analysis and forecasts which provided several assumptions underpinning the business plan, capital allocation, production scheduling, cash management, and other activities such as exchange rate and commodity hedging. Internal publications included report of these analyses, as well as presentation materials used to communicate these forecast recommendations. Early in her career at Ford, Hughes-Cromwick was responsible for the analysis of U.S. and South America economic and financial conditions and forecast. She used the Macroeconomic Advisers macroeconometric model to develop the U.S. forecasts. Several of the work products included:

- Monthly updates of U.S. economic and industry volume forecast for current and next year
- Monthly publication called "Global Business Summary." This publication included updates on data and analysis of macroeconomic environment in all major economies.
- Bi-annual updates of U.S. economic and industry volume 10-year forecast
- Development of a Europe industry model (Vector Autoregression) for the five biggest markets, including forecast ranges
- Development of U.S. industry volume scrappage model using Weibull distribution this work was
 presented to Chair Greenspan at the Federal Reserve and provided a foundation for the 2009 Ford
 Trade Secret Award
- Developed a quantitative model to provide early warning signals for exchange rate devaluation risk; was used by Treasury as input to hedging policy
- Developed an analysis of health care cost structure for active and retiree populations; decomposed health care costs into utilization and pricing trends for many of the top diagnostic related groups (DRGs) and evaluated the impact of co-pays on utilization rates.
- Undertook several iterations of the impact of yen currency changes on the cost structure of Japanese competitors. This analysis allowed us to gauge the effect of currency changes on competitors' net pricing for key product lines (e.g., mid-size sedan).
- Participated in several strategic studies to assess proposed acquisition or plant expansion. Over the course of several years, participated in strategic reviews of several locations such as China, Russia, Turkey, Romania, and India.

U.S. Department of Commerce

Commerce Secretary is a member of the Cabinet "Econ Principals" team (includes Commerce, Office of Management and Budget, Treasury, Council of Economic Advisers). Among the 12 Bureaus that comprise Commerce, it oversees the production of much of the nation's economic statistics. As chief economist, Hughes-Cromwick produced weekly briefings which served as one element of support for the Secretary and the leadership team. These 1-2 page summaries were concise and often included "key takeaways." Hughes-Cromwick developed the analysis from key source data. The deputy chief economist or one of the senior economists often provided editorial and/or research assistance. A partial list of the publications titles is included below:

- Financial Asset Returns
- Consumer Confidence
- 2016 Recap and Outlook
- U.S. Business Investment
- Monetary Policy Shifting
- Updated U.S. Health Spending Estimates
- Global and U.S. Business Tailwinds
- U.S. Federal Budget and Interest Rates
- Autonomous Vehicle Business
- U.S. Labor Market
- OECD Economic Forecast
- China Economic Trends
- Germany Business Trends
- Emerging Market Signals
- U.S. Employment
- Nonfinancial Corporate Trends

- Services Economy
- Manufacturing Jobs Anatomy
- India Update
- Nonfinancial Business Roundup
- Helicopter Money
- U.S. Economy
- U.S. Inflation Trends
- China Update
- Post-Brexit Vote
- U.S. Bond Market
- Europe
- Mexico
- S&P Earnings
- Investment
- GDP Estimates
- Financial Conditions
- Q1 Assessment
- Corporate Profits
- UK
- Trade
- China
- Brazil
- Economic Expansion
- Capital Spending
- Deflation
- Exchange Rates
- Oil Markets
- China Capital Markets
- Consumer Sector
- Housing
- Purchasing Managers' Index

Ford Trade Secret Awards

Ford Trade Secret Awards are internal patents. These patent applications undergo a rigorous internal review process. Hughes-Cromwick worked with team members in the Corporate Economics and Strategic Issues Office to develop models used for business planning. Two of these models received Trade Secret Awards. Recognition includes an engraved plaque and a small cash award.

- U.S. Industry Volume Model 2009. This model used an innovative modeling approach to U.S. new vehicle demand.
- U.S. Full-Size and Compact Pickup Truck Model 2013. This model used an innovative modeling approach to U.S. new pickup truck demand.

Private Sector Work Products

As chief economist at Ford Motor Company, Hughes-Cromwick led a team of economists responsible for the Company's global industry volume (vehicle demand) outlook and strategic review of key external factors affecting the automotive industry (e.g., energy prices, policy developments). Hughes-Cromwick led the Corporate Economics and Strategic Issues Office (CESI) and reported to the CFO of the company. CESI provides analysis and forecasts of global business conditions and the economic impact of regulatory and policy issues. CESI is responsible for development of the Worldwide Industry Planning Volumes (IPV) for the Business Plan (e.g., 2014 – 2023), global exchange rates, global GDP and CPI, interest rate and oil and fuel price forecasts. CESI professionals lead monthly industry meetings which help to set production schedules in all of the assembly plants worldwide. CESI supports the development of the corporate Business Plan, strategic reviews, and other global studies. CESI also provides capability for special studies and consultation on corporate strategic issues.

Roles and Responsibilities

- Monitor external business environment and communicate critical developments to internal customers
- Key economic and financial indicators for major markets (monthly, including chart books)
- Weekly support and frequent presentations at top executive meeting (these meetings were used to run the company. Designed inputs for these two key meetings including weekly updates of key metrics (global and by geographic region) which included over 30 slides

- Special attention reviews at frequent executive meeting for emerging issues e.g., special attention items related to economy, industry, economic policy, exchange rates, and commodities.
- Hughes-Cromwick gave presentation on Global Business Environment at Board of Directors (BoD) meetings
- Present Ford's views to other groups, both internal and external (ongoing)
- Monthly pre-BoD briefing updates for senior management
- Global Exchange Rates, Interest Rates, and GDP/CPI forecasts (monthly)
- Industry consensus meeting participation for U.S., Europe, FSAO, and APA (monthly) including 10
 meetings/conference calls with Sales and Planning team in respective markets
- Oil and Fuel Price forecasts (monthly, expanded to include reviews of China energy)
- Quarterly Automotive Strategy Meeting (ASM) Key Strategic Trends update
- Business Plan Global Economic Outlook and Industry Planning Volumes (twice per year) The January/February release included 55 pages of data and analysis to support the operations as they developed their business and operation plans as well as budgets and capital allocation
- Emerging Issues for the Strategic Assessment (annually)
- Development of "Green Bond" concept in 2004 to support R&D for sustainable technologies
- Update of Worldwide Vehicles in Operation (VIO)
- Europe commercial vehicle segmentation model and passenger car analysis

Expanded Responsibilities since Financial Crisis

- Business Plan Industry Planning Volumes now conducted 2 times per year
- New vehicle demand and vehicle line segmentation studies: Australia, China, U.S. pickup trucks
- Scenario development for 4 markets to support capital strategy downturn planning
- Supported Global Capacity Planning medium term demand risk (MTDR) 4 markets
- Vehicle industry pricing trend projections for U.S., Canada, Brazil, U.K., Germany, China, India, and Australia
- North America and South America Industry Consensus participation (3 meetings per month to set key
 parameters for production scheduling)
- Asia Pacific Industry Consensus process development and participation (6 meetings per month to set key
 parameters for production scheduling)
- U.S. regional industry analysis to support Americas, Marketing Sales & Service (MS&S)
- Cash management and capital allocation activities supported these activities on a routine basis
- Seasonal (SAAR) factor model upgrade for production scheduling requirements
 Ensured training and certification of staff to develop seasonal factors using ARIMA X11 model
- Ensured training and certification of start to develop seasonal factors using ARIMA X11 mo
 SAAR factors developed for over 30 countries and for multiple vehicle segments
- Initiated comprehensive coverage of new operating unit in 2012 2014: Middle East and Africa

Hughes-Cromwick led a group of economists and oversaw research agenda. Examples of research, special studies include:

- Special studies of economic outlook and risks for major markets and programs
- U.S. Pickup industry sales forecast model
- CO2 analysis for U.K. segmentation
- China segmentation and China Better Plan
- Participant in development of Board of Director's Strategic Review
- U.S. automotive revenue, new vehicle net pricing, and spending on new vehicle content
- Volatility of U.S., European, and emerging market industry volumes
- Competitiveness analysis for both mature and emerging markets
- Impact of changing fuel prices on U.S. vehicle segmentation
- "Who Buys What?" vehicles in major markets, including new and used buyers
- Emerging markets industry volume forecasting model ("S-curve")
- U.S. trend industry volumes (scrappage) forecasting model
- CO₂ forecasting model for Ford and U.S. vehicle fleet (mobile emissions and gasoline cost)
- Supporting climate change regulatory and policy analysis for Corporate Affairs and Office of General Council
- Pension and health care studies
- Input to Business Plan health care expense forecast
- Estimation of Ford productivity in U.S.; labor costs in several of Ford's markets
- China and India vehicle stock studies by region and province
- China macro risks and implications
- South Africa economic and industry trends; Australia economic and industry trends
- Analysis of Europe commercial vehicle industry and passenger car industry by market
- Brazil regional industry volume trend study
- Brazil vehicle market affordability study

Hughes-Cromwick led the team and the support they provided through several crises impacting the automotive

and automotive financing operations, including:

- ASEAN crisis in the late 1990s
- Russian debt defaults
- Korean won devaluation
- Turkey lira devaluations
- Argentina peso devaluations
- Brazil reais devaluations
- Venezuela crises
- Global financial crisis
- European debt crisis

Work Products During the Financial Crisis

Given the increasing stress on the business environment, especially financing conditions for the automotive as well as finance affiliate of Ford Motor Company, Hughes-Cromwick's work products continually evolved. Leading up to the financial crisis, Hughes-Cromwick initiated meetings with top policymaking officials in Washington, D.C. Hughes-Cromwick was preparing near-daily assessments of economic and financial conditions for senior executives of the automotive and the financing affiliates, including Ford Motor Credit and FCE Bank (UK bank wholly owned by Ford). Frequent trips were conducted to meet with policymaking officials in Washington, D.C., London, Frankfurt, and Shanghai.

Hughes-Cromwick was part of the senior team which prepared testimonies and other materials to support Congressional hearings and meetings with the Presidential Task Force on the Automotive Industry (Reference for this work: Christina Romer, Professor of Economics at the University of California, Berkeley who was a member of this task force and with whom Hughes-Cromwick interacted during this period).

Supporting and contributing to the success of the Company during this period required significant organization, communications, and leadership among a large team working together through many long days and weekends. The CFO requested that Hughes-Cromwick move to Washington, D.C. during this period in order to support policy stimulus being debated and implemented to support the U.S. economy.

Chief Economist at U.S. Department of Commerce

Commerce Secretary Pritzker recruited Hughes-Cromwick in the fall 2015 to join the Department as its chief economist. Working with a team of 20 professionals, including several Ph.D. economists as well as junior economists with Master's degrees, the office supported the major pillars of the Department's Strategic Plan 2014 – 2018. The staff conducted top research studies in the areas of trade and investment, skills for business, manufacturing, STEM, apprenticeships, digital economy, and EB5 visas. Hughes-Cromwick oversaw the initiation of analytics to improve the quality, scope, and timeliness of economic statistics. As a leader for the Federal Economic Statistics Advisory Council (FESAC), Hughes-Cromwick worked to increase membership on the Council from the private sector, particularly professionals from firms using or producing Big Data. She was able to secure new members from Amazon, IBM, Haver Analytics, Nielsen, and Zillow. Hughes-Cromwick was also able to secure Susan Athey, The Economics of Technology Professor at the Stanford Graduate School of Business at Stanford University. Together, these new FESAC members will advise the executives of the Census Bureau, Bureau of Economic Analysis, and the Bureau of Labor Statistics as they improve the quality, scope and timeliness of economic statistics (Reference: Matthew Shapiro, Lawrence R. Klein Collegiate Professor of Economics, University of Michigan. Professor Shapiro is Chair of FESAC).

Hughes-Cromwick was asked by the Council of Economic Advisers to participate in the Administration's preparation of the U.S. economic forecast which underpins the development of the Administration's Federal Budget for submission to Congress. Hughes-Cromwick participated in two rounds of the economic forecast updates and was asked to present the Administration's forecast at the OECD Short-Term Economic Projections (STEP) meeting in October 2016.

As part of her official duties at Commerce, Hughes-Cromwick convened a group of 20 business leaders in North Carolina on Manufacturing Day (October 7, 2016). This event was coordinated by leaders of RowanWORKS, an economic development organization in Salisbury, NC. Several tours of local manufacturing facilities as well as a roundtable discussion with local business leaders provided a full vetting of many economic development challenges and opportunities facing leaders in these communities.

Hughes-Cromwick supported the White House convening of #hackthepaygap which included efforts by technology professionals to develop online tools to confront gender wage disparities. She participated in two WH led panels during the contest and offered advice and support for tech teams launching apps and other tools to address the gap.

Leadership

- Board member, National Association for Business Economics (NABE), 2000 2003 (elected position)
- NABE Policy Conference Co-Chair 2003 2006
- NABE Vice President and Board Member 2006 2007 (elected positions)
- Initiated a collaboration between NABE and Charles Plott, Professor of Economics at CalTech and a pioneer in experimental economics. During 2005 2009, we developed an online platform for "information aggregation experiments." This included participation from NABE Outlook Panel members several days just prior to the release of key economic statistics employment and the consumer price index. Through online auctions of forecast points, we developed a probability distribution of forecast outcomes. Following the release of the actual data, we drew comparisons to determine the efficacy of this forecasting method.
- NABE President 2007 2008 (elected but unopposed)
 - Initiated and moderated a debate at the National Press Club of the Presidential campaign economic advisors on policy matters
- NABE Certificate of Business Economics (CBE®) Steering Committee Member
 - Along with other NABE Board members, led the effort to develop the CBE®, establishing a body of knowledge and now enrolling nearly 500 professionals since 2012; over 200 have taken the exam and now have the CBE® professional designation
- NABE Foundation Board Member
- Hughes-Cromwick participated in two major leadership training programs during her time at Ford Motor Company. In 2000, she was asked to participate in the Company's Executive Partnering Program. This 12-month program included extensive time being coached by senior executives. She spent two weeks with the CEO, Jacque Nasser, as well as the CEO of Ford Credit, Henry Winkler, and the Executive Vice President of Purchasing, Carlos Mazzorin, among several others. She worked with two other team members on a brand crisis management case study (this was during the Firestone Tire Crisis). Together they developed recommendations on key efforts to undertake during such a crisis period.
- In 2011, Hughes-Cromwick was one of two executives selected among the entire Global Finance organization to participate in the Global Executive Leadership program. This program was a tremendous benefit to Hughes-Cromwick, helping her to extend her ability to work in diverse team settings, to lead with positive, inclusive behaviors and effective communications. This supplemental education was invaluable as she expanded her roles and responsibilities at Ford.

Mentoring

- Hughes-Cromwick has mentored many young professionals during her time at Ford and at the U.S. Department of Commerce. She has participated in the NABE mentoring program.
- More recently, she has mentored staff at the Department of Commerce. As part of this effort, she worked to support a Ph.D. student in economics at Howard University. Hughes-Cromwick actively supported the development of her Ph.D. thesis and connected her with housing industry experts at Redfin, Fannie Mae, the Federal Housing Finance Agency, and the Harvard University Joint Center for Housing Studies.
- During her time at Commerce, Hughes-Cromwick initiated a speaker series. With over 14 experts visiting Commerce during the 12 month period, these professionals provided career perspectives for the attendees as well as outstanding presentations on a variety of topics, including health care, income inequality, Brexit, housing, manufacturing, and financial conditions.