

The Heart of a Great University

6 April 2017

TO: Sarah Mangelsdorf, Provost

FROM: John Karl Scholz, Dean

RE: Request to Establish a New Center for Research on the Wisconsin Economy (CROWE)

CC: Greg Downey, Associate Dean for Social Sciences

Elaine M. Klein, Associate Dean for Academic Planning, L&S

Jocelyn Milner, Associate Provost and Director, Academic Planning and Analysis

Ananth Seshadri, Professor and Chair, Economics

Attachment: Center for Research on the Wisconsin Economy (CROWE), letters of support from Agricultural and Applied Economics, Institute for Research on Poverty, LaFollette School of Public Affairs

On March 7, 2017, the L&S Academic Planning Council considered the attached request to create a new L&S center, which will focus its research on the Wisconsin Economy, building and analyzing unique datasets, developing economic projections and trends, and evaluating the impact of policy on the state's economy. It will make this economic research accessible to students, policymakers, businesses, and community groups in Wisconsin and around the nation through annual conferences and research reports. The center will be led by a director who will work with faculty and a board of advisors, which will include economists on campus, alums, and community members. The L&S APC was pleased to approve this request.

In a subsequent joint meeting of the CALS and L&S APCs held on April 4, 2017, the proposal was shared with our colleagues in that College, who had an opportunity to ask questions about the Center. The CALS APC expressed no opposition to the proposal.

#### **Center Name**

Center for Research on the Wisconsin Economy (CROWE)

# **Home Department**

**Economics** 

## **Home College**

L&S

### **Primary Contact Person**

Ananth Seshadri, Professor and Chairman, Department of Economics (aseshadr@ssc.wisc.edu)

#### **Timetable for Initiation**

May 2017

#### **Overview/Summary**

The proposed center will support and disseminate economic policy research, with a focus on the Wisconsin economy and state-level economic policy issues. A main goal of the Center will be to support research to better understand the economic outcomes and the impacts of policies at the state-level, and provide a bridge which will make this economic research accessible to students, policymakers, businesses, and community groups in Wisconsin and around the nation. The Center would issue regular reports and forecasts on major economic trends in the state, and produce in-depth timely studies on major issues facing the state economy. The Center's key public outreach event will be an annual conference, highlighting research reports from the Center as well as related work by external researchers, for an audience including state business leaders, policymakers, students, faculty, and others from the University community.

# Detailed Objectives:

One goal of the project is to compile and estimate a data set of quarterly state-level economic aggregates. While many of the macroeconomic variables are available on public databases, several key variables are only available at annual frequencies. But for many questions, data at the quarterly frequency (or higher) are needed. The center will use annual data on the variables of interest, along with other economic indicators which are available quarterly, to estimate quarterly time series for all key state-level macroeconomic indicators.

After constructing the data set, an empirical analysis of the data will be conducted. The first step will be a less structured analysis of data, using panel VARs (Vector Auto Regressions) to decompose the state-level variables into long-run growth trends and business cycles.

Importantly, the spatial aspects of the data will allow us to analyze state, regional, and aggregate factors, and to trace how shocks affecting one state or region may diffuse to others. In addition, states that have different dynamics will respond differently to aggregate shocks. Moreover, the trends, dependencies, and dynamics may have changed over time. Estimating and analyzing time-varying panel VARs will provide useful comparisons across states on the commonalities and differences in growth, business cycles, and the impacts of shocks.

While the empirical analysis can help describe the dynamics of state economies, one of the goals of the Center is to study the impact of state-level economic policy. To do so, we will then develop and estimate structural models of the state-level economies. This will allow for policy analysis and evaluation, including counterfactuals and simulations of alternative policies. We will build on small open economy (Dynamic Stochastic General Equilibrium) DSGE models which have been estimated for the Euro area, adapting and applying them to study U.S. states. This will then allow us to study the impact of state-level tax policy, including the differential effects of taxes on personal income, business or corporate income, consumption or sales, and property. We will also study strategies for fiscal consolidation, as many states face looming budget deficits due to pension liabilities. In addition, we will analyze the sources of fluctuations and the importance of economic frictions in each state.

#### **Purpose and Mission**

The primary mission of the Center would be to provide objective economic research to support economic development and policy evaluation for important state-level issues. This would fill a need in raising the level of policy discussion in the state, developing new ideas and initiatives for economic development in the state, and bringing attention to potential areas of reform. The Center would provide a crucial link in tying the UW to the broader policy and business community statewide, expanding the outreach from academic research to practical application. The Center's activities could have broad potential impact within the state. The Center will complement and augment the Wisconsin focused economic development work conducted on campus. This includes (but is by no means limited to) work conducted within AAE (including its partnership with the CCED) as well as IRP and Laffollette.

While the Center would focus on issues in the state of Wisconsin, research at the Center would also draw on the lessons from other states. The states are the well-known "laboratories of democracy" and their differing experiences can shed light on a number of important economic issues. The diversity of different statewide and regional factors and policies, along with the commonality in national factors and federal policies, can potentially allow for a clear isolation of sources of differences in statewide economic performance. While there is a wealth of research on economic factors and policy issues at the national level, there is comparatively little academic research on the economic issues and policies affecting states. By evaluating and comparing economic trends and policies across states, the Center's research could have broad interest and impact nationally.

# Overview of the Framework used for Analysis:

The panel VAR models allow for a broad range of interactions across states and regions, with rich patterns of dependence and time variation. However, a number of substantive economic and policy questions require more structure, and the ability to be able to consider counterfactuals. Therefore, we develop a micro-founded structural model of state-level economies. The model will be a variant of a small open-economy New Keynesian dynamic stochastic general equilibrium model, of the type that have been widely used in monetary policy analysis. Recent years have witnessed the development of a new generation of DSGE models which incorporate a significant number of real and nominal rigidities. At the same time, major advances in estimation methodology have allowed researchers to estimate variants of these models. Empirically, many of these theoretically-based DSGE (structural) models compete with (reduced form) VARs in fitting the data.

This class of models is particularly suited for evaluating the consequences of alternative macroeconomic policies. In this vein, several central banks and other institutions have developed micro-founded models to provide quantitative input into the policy process. Examples which are related to the model used by the Center include the New Area-Wide Model used by the European Central Bank, and the SIGMA open economy model and EDO closed economy model used by the Federal Reserve.

In developing a state-level DSGE model, the Center will consider each U.S. state essentially as a small open economy. That is, we will consider each state separately as a small open economy in a monetary union with the (rest of the) U.S. Each state is small; in that it does not affect total output or the determination of policy at the national level. Relative to the Euro area, the United States is a true federal system with a common federal fiscal policy to go along with the common monetary policy. A key question the Center will address is the relationship between federal and state-level policies. Moreover, relative to a true open economy model, my model is simpler, as I don't consider international trade. Thus, the problem of firms exporting from a state is simpler, as there are no trade barriers and relatively minor costs for producers in one state to sell their goods in other states.

#### Detailed Research Plans

As an example of the type of research that the Center will produce and support, consider the impact of changes in taxes or labor market regulations at the state level. To be even more concrete, consider the impact of the Manufacturing and Agriculture Credit in Wisconsin, a measure which has been phased in over the past four years, which effectively cuts taxes on corporations and small businesses in the affected sectors. Important questions about this measure include: whether it has increased investment and employment in the state (both in the targeted sectors and more broadly), whether this was an effective use of tax revenue, and what would be the impact of replacing the credit with a broad-based tax reduction.

To evaluate the economic impact of the policy and potential reforms, we need to be able to construct a counterfactual: what would have happened to the state economy if the policy had remained unchanged, and how would the economy respond to a different policy. This is a

difficult task, and many popular discussions of the impact of policy changes have been misleading in constructing these counterfactuals and in isolating policy effects. For example, some reports analyzing the effects of changes in state taxes or regulations simply contrast the economic performance of states where a policy has changed with those in which it has not. While these results are indicative of potential policy effects, they implicitly assume that the states are identical apart from the policy change, and the policy change is the only source of variation. These assumptions often strain credibility. More credible are studies which pool the experience of multiple states, and include many control variables in an attempt to isolate the average policy impact. However, even in such studies the direction of causation, the channels by which policy changes lead to economic outcomes, and the quantitative impact within any one state (not averaged across states) are difficult to determine.

An alternative approach, which will research in the Center will focus on, is to develop a structural model of a state-level economy which explicitly spells out the role of policy and the channel by which it impacts the economy. For example, the model would include the decisions of workers on whether and how long to work, and whether to move to another location. In addition, it would consider the decisions of firms on how many workers to hire, where to locate, and how much to invest. These decisions will naturally vary with changes in policy, which will affect equilibrium employment, wages, and output in the state. Such a model allows researchers to hold fixed all other aspects of the economy, change an economic policy, and see the quantitative impact of the change.

Models of this class are widely used to address a host of policy questions at the national level, both in academic research and in applied policy work by government agencies and think tanks. For example, the Tax Foundation and the Tax Policy Center have each developed model to estimate the impact of federal tax reform, focusing on the changes in revenue the distribution of the tax burden under alternative policies. The Tax Foundation even estimates the dynamic growth impact of tax policy changes on output, wages, and employment. However there has been relatively little work to develop and apply structural, state-level economic models. One of the main goals of research in the Center will be to develop a structural model of the economy of Wisconsin, and potentially other states as well. This model will allow us to provide regular forecasts for key economic indicators in the state. These forecasts will provide useful information for businesses, government agencies, consumers in the state. The structural model will allow us to address a wide array of policy questions, and to provide quantitative evaluations of the impact of alternative policies. For example, we will study the impact of state-level tax policy on output and employment, including the differential effects of taxes on personal income, business or corporate income, consumption or sales, and property. This will allow us to evaluate the effects of changes in tax rates and the structure of the state tax system. Other applications include: the effects of statewide labor market regulations, the implications of tax credits for investment and business relocations for both output and government revenues, and the effectiveness of state-level fiscal policy as a stabilization tool to smooth the response of the economy to exogenous shocks. These applications are only the beginning of the types of policy issues which the model would be able to address.

The development and refinement of the model of the state economy will be an ongoing process. Over time the model will be refined and extended, and its estimates and structure revised with new data and as the result of policy changes. Initially, we will focus on some of the key aggregate economic variables in the state, like output, employment, consumption, and wages. Future extensions of the model will allow for the integration and modeling of different industries and sectors of the state economy, such as manufacturing, information services, agriculture, the public sector, and education. This will allow us to gain a finer-gained understanding of changes in the state's economic structure and dynamics, and allow for a much broader class of policy applications and evaluations.

In addition to the model of the state economy, the Center will also support cross-sectional research projects that utilize the experience of other states. These will provide more targeted studies of economic and policy issues, drawing on variations in state or regional economic factors and policies to gain insight on the importance of economic mechanisms and policy effects. For example, some recent papers have used different sources of exogenous variation in fiscal policies across states to estimate the effect of state government spending on output and employment. In addition to being of interest these cross-sectional studies will help inform and discipline our structural model of the state economy.

# Relationship to Other Centers

As discussed above, the Center would play a unique role both within the state and nationally, providing objective economic research for state-level issues. There are existing policy institutions and think tanks in Wisconsin that focus on related similar issues, which play an important role in the policy debate. As mentioned earlier, the Center will complement and augment the Wisconsin focused economic development work conducted on campus. The Center would add a new dimension by providing more in-depth original academic research to better understand trends in the state economy, and to examine and evaluate alternative policy proposals.

In addition, there are related economic research centers in other states, but they also differ in focus and scope from the CROWE. For example, the Research Seminar in Quantitative Economics at the University of Michigan provides forecasts of the Michigan economy, but does not have a policy component. The Center for Business and Economic Research at the University of Kentucky is a state-supported institute which focuses on the Kentucky economy, conducting studies for federal and state agencies. The Wisconsin Center will have a stronger academic research component, and will have an independent research and policy agenda.

#### Name

The name, the Center for Research on the Wisconsin Economy, identifies the main focus of the Center's activities. It explicitly states that the Center will focus on economic research aimed at better understanding the economy in Wisconsin.

### **Organizational Structure and Governance**

The Center will operate within the Department of Economics. It will be governed by a Director (appointed by the Chair of the Economics Department), and be subject to periodic

review by the Executive Committee of the Department of Economics. A Board of Advisors will oversee the activities of the Center, review the annual reports, and make recommendations. The Board will consist of (ex-officio) the Director of the Center and the Chair of the Economics Department, as well as additional members drawn from supporters of the Center, members of the Economics Department Advisory Board, and other members of the community. The Advisory Board members will include economists on campus, as well alums and community members with a deep interest in economic policy in Wisconsin who value the contributions of the Center and are willing to support the activities of the Center. The Center Director will appoint/remove the Board of Directors for a period of 3-5 years in consultation with the Department Chair. We anticipate having 5-10 board members. The Center will have Faculty affiliates drawn from Faculty in Economics and other parts of campus. In addition, two Faculty Fellows will be awarded each year. Faculty Affiliates and Fellows will have governance rights such as the power to make recommendations to the Department Chair in selecting a new Center Director.

At our faculty meeting on December 16, the department voted to create the Center for Research on the Wisconsin Economy (17 for, 2 abstentions).

The inaugural Director of the Center will be Noah Williams. Here is a brief bio.

Noah Williams, founding Director of the Center, is the Juli Plant Grainger Professor of Economics at UW-Madison, where has been on the faculty since 2008. Previously he was on the faculty at Princeton University. His research focuses on macroeconomics, with interests in monetary policy, social insurance programs, and financial markets. His work has studied the impact of uncertainty, imperfect knowledge, and asymmetric information on economic outcomes and their implications for policy. He has published widely, including co-authoring several papers with Nobel Prize recipients Lars Peter Hansen and Thomas Sargent. A 2001 PhD graduate of the University of Chicago, he is a consultant to the Federal Reserve Bank of Chicago, currently serves on the Economic Advisors Roundtable organized by the WMC and WEDC.

#### **Financial Support**

The Center has been awarded a grant for 2016-2017 from the Lynde and Harry Bradley Foundation grants program. We anticipate this grant being renewed in future years. We are also awaiting a formal grant commitment from the Charles Koch Foundation, who have indicated their support and plans to commit funds for a two-year horizon. We also anticipate this grant being renewed beyond that horizon.

These funding sources are sufficient to initiate the Center and support its operation. For the longer-term, we are investigating securing additional support from donors. These two funders are willing to underwrite the center, unconditionally, but for a limited period of time. While these funders may choose to withdraw the funding, we emphasize that the research produced by the center will not be designed for the purpose of pleasing those funders in order to ensure continued funding. No donor gets to set the research agenda of the center. Decisions about the way resources are employed would rest with the executive committee, and the donor would not be directing the research conducted. The principles of academic freedom and lively internal

departmental debate about the quality and integrity of the research and activities supported by those funds would insulate the work from political influence.

# **Project Budget**

Here are some rough line items for the breakdown of the budget items:

Director (course release cost)
Research Economist (salary + fringe)
Administrative Staff zero (salary + fringe paid by Econ Dept.)
Conference + Travel
Faculty Affiliates
Research Assistants
Total \$340,000 (100,000 from Bradley Foundation and 240,000 from Charles Koch Foundation)

#### **Administration of Grants**

Grants run through the Center will be administered by the Center.

### **Staffing**

We plan to hire a Research Economist whose main focus will be to help conduct the Center's research activities, in conjunction and consultation with the Director. The research will activities will also be supported by Research Assistants, graduate students from the Department of Economics. In addition to the Director, some additional faculty will join the Center as Affiliates, writing research reports and contributing to the Center's annual conference. Researchers on campus with an interest in research on the Wisconsin economy who can contribute to the mission of the Center will be considered. The Center Director in consultation with the Merit Committee of the Department of Economics will make this decision. Faculty affiliates will be involved with the Center activities and will be consulted on all matters concerning the center including appointment of a new Center Director. In addition to Faculty Affiliates, the Center expects to fund two Faculty Fellowships each year. The Center Director will make this decision in consultation with the department's Merit Committee.

We plan to hire a support staff member who will assist the Director with coordinating the activities of the Center, including making arrangements for the annual conference, maintaining the Center's website and social media, and assisting with the annual newsletter.

#### **Space**

We hope to be assigned space in 2017-18 in the Social Sciences Building or in a nearby location.

# **Life Cycle Growth or Discontinuation**

The Center will not evolve into a department. It will be discontinued at the direction of the Department of Economics or if the funds are not adequate to support the activities of the Center. Contingent upon achieving satisfactory outcomes and securing additional funding, the Center will grow in future years to expand the scope of activities and add additional staff (research economists, faculty affiliates, and research assistants).

#### **Evaluation**

There will be an annual review of the activities of the Center, resulting in an annual report issued by the Director to the Board of Advisors. (a) The Center Director will provide an annual report of activities to both the Board of Advisors and the Economics Executive Committee; (b) The Board of Advisers may respond with non-binding feedback to the Director; (c) The Economics Executive Committee will vote on whether to accept the report each year; and (d) Economics will forward the accepted report to L&S each year.

We will follow the following procedure for the five-year review: (a) Center Director provides a five-year self-study, submitting to the Board and to the Economics Executive Committee; (b) Board responds with non-binding feedback; (c) Executive Committee responds with a vote to either continue or discontinue the Center; and (d) Economics Executive Committee vote get sent to L&S, where the L&S APC reviews and votes to either accept or reject the review as complete.



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427 Lorch Street, Taylor Hall

Office of the Chair

February 24, 2017

Professor Ananth Seshadri Chair, UW-Madison Economics Department By email

Dear Ananth,

This letter provides an endorsement of the proposal to establish a Center for Research on the Wisconsin Economy (CROWE) housed in the Department of Economics. My colleagues and I see this as a potentially valuable addition to existing scholarship on the UW-Madison campus addressing Statelevel economic and policy issues.

While it's reasonable to expect there will be considerable subject matter overlap between CROWE and existing campus centers, the models and research methods described in the CROWE proposal are sufficiently different that it is likely that the relation will be more complementary than competitive. We are therefore pleased to welcome this addition to the campus community of scholarship and outreach on the Wisconsin state economy.

Sincerely,

Ian Coxhead

Professor and Chair

Ian Coxhu



Director, Institute for Research on Poverty Vilas Distinguished Achievement Professor and PhD Program Chair, School of Social Work Lmberger@wisc.edu

February 10, 2017

Ananth Seshadri Professor of Economics, Todd E and Elizabeth H Warnock Chair in Economics Chair, Economics Department University of Wisconsin-Madison

Dear Professor Seshadri:

I write on behalf of the Institute for Research on Poverty to express our enthusiastic and full support for your proposed Center for Research on the Wisconsin Economy (CROWE). I and we believe that CROWE will be a true asset to the campus and the state as a whole.

As you know, IRP is a center for interdisciplinary research into the causes and consequences of poverty and social inequality in the United States. The Institute is nonprofit and nonpartisan. It has a particular interest in poverty and family welfare in Wisconsin as well as the nation. CROWE's mission—to support and disseminate economic policy research, with a focus on the Wisconsin economy and state-level economic policy issues; to support research to better understand the economic outcomes and the impacts of policies at the state-level; and provide a bridge which will make this economic research accessible to students, policymakers, businesses, and community groups in Wisconsin and around the nation—nicely complements IRPs. We hope the two centers can work closely and establish productive synergies. We firmly believe CROWE will be a valuable partner and campus, state, and national resource, and very much look forward to its establishment.

We wish you the very best in this endeavor and are happy to lend our support in any way.

Sincerely,

Lawrence M. Berger

Director, Institute for Research on Poverty

Vilas Distinguished Achievement Professor and PhD Program Chair, School of Social Work



# The Robert M. La Follette School of Public Affairs

**Donald Moynihan** Professor of Public Affairs

February 15, 2017

University of Wisconsin–Madison 1225 Observatory Drive Madison, Wisconsin 53706 Phone 608.263.6633 Fax 608.265.3233 E-mail: dmoynihan@lafollette.wisc.edu

#### To Whom It May Concern:

On behalf of the La Follette School of Public Affairs, I write this letter to express out support for the proposed Center for Research on the Wisconsin Economy (CROWE). The La Follette School is the primary public policy unit on the UW-Madison campus, applying a mixture of disciplinary perspectives to identify and solve policy and implementation problems.

Professor Williams is a widely respected economist with expertise on economic modeling. Both my colleague Professor Tim Smeeding and I met with him to discuss the Center. We discussed opportunities to co-host public events that could showcase UW-Madison research to policymakers. We believe the proposed center would complement existing research units on campus.

Sincerely,

Donald P. Moynihan

Director, La Follette School of Public Affairs