## **High-Performance Work Practices and Sustainable Economic Growth**

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The Obama Administration plan for supporting long-term, sustainable economic growth calls for significant investments in key industries such as infrastructure, renewable energies, health care, and perhaps others yet to be identified. A large and growing body of evidence demonstrates that achieving a return on these investments requires a matching workforce-development and workplace-innovation strategy. This memo reviews that evidence and suggests the need to link workforce/workplace strategies directly to macroeconomic and industry-specific investment policies.

# **Impact of High-Performance Work Practices**

Different labels have been used describe this research, including high-performance work systems, high-commitment work systems, high-involvement work systems and high-performance human resource management. Their common thread is that achieving and sustaining high levels of performance requires a positive workplace environment and practices that develop and leverage employees' knowledge and ability to create value. While the specific practices need to be tailored to fit different industries and occupations, they generally include selection, training, mentoring, incentives, knowledge-sharing, partnership-based labor-management relations and other shared decision making mechanisms. These practices are most effective when they are implemented together and in concert with new capital or technological investments.

Researchers have documented the impact of high-performance work practices on efficiency outcomes such as worker productivity and equipment reliability; on quality outcomes such as manufacturing quality, customer service, and patient mortality; on financial performance and profitability; and on a broad array of other performance outcomes. Although some studies have found mixed results regarding performance differences associated with these work practices, many other studies have found that these work practices explain significant performance differences among auto assembly and parts plants, steel mills and finishing lines, call centers, airlines, health care clinics and hospitals, and high technology firms. The magnitude of the effects is substantial, with performance premiums ranging between 15 percent and 30 percent.

## **How High-Performance Work Practices Work**

High-performance work practices have been shown to work in three different ways: (1) fostering development of *human capital*, creating a performance advantage for organizations through processes such as increased employee skill development and improved customization by employees in service industries; <sup>16</sup> (2) enhancing the *motivation and commitment* of employees, creating an organizational and labor-management climate that motivates and supports employee

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engagement in problem solving and performance improvement;<sup>17</sup> and (3) building organizational *social capital*, which facilitates knowledge sharing and the coordination of work, and thus improves performance.<sup>18</sup> Research in settings ranging from public schools to airlines has demonstrated the added benefits to be realized when work practices encourage the simultaneous development of human capital and social capital among employees.<sup>19</sup>

## The Role of Unions in Implementing High-Performance Work Practices

Neither highly adversarial battles over union organizing nor ongoing adversarial labor-management relations are conducive to implementing and sustaining high-performance work practices or achieving positive results. However, labor-management partnerships based on mutual respect for worker, union, and employer rights and responsibilities have been shown to achieve high performance by facilitating employee participation and related high-performance work practices and by creating social networks within and across organizations. <sup>20</sup> In particular, the presence of a union is positively associated with a greater number and greater effectiveness of high- performance work practices. <sup>21</sup> Furthermore, a combination of formal and informal mechanisms for employee voice has been found to improve the productivity effects associated with implementing high-performance work practices compared to implementing the same practices with just informal voice mechanisms or no employee voice. <sup>22</sup>

### **Workforce Benefits**

Workers benefit from adoption of high-performance work systems in three well-documented ways: (1) their human and social capital and therefore their market value are increased by the technical and problem-solving training built into these systems; (2) more than 70 percent of workers prefer these work systems over either traditional union or non-union systems; and (3) when combined with union representation, these work systems tend to be associated with higher wages, some of which are achieved through mutual gain-sharing or similar compensation practices.<sup>23</sup>

### **Conclusions and Policy Recommendations**

The research evidence that employers, employees, shareholders, and customers can simultaneously benefit from work practices that enhance worker motivation, human capital, and social capital is robust across a wide range of industries. At the same time, such practices cannot be implemented in a "cookbook" manner but instead must be tailored to particular industries and work settings. The evidence is clear-cut: achieving and sustaining world-class levels of performance requires an integrated approach to capital investment, investment in and introduction of new technologies, and implementation of high performance workplace practices tailored to the specific industry and technology. Policymakers can support the development and widespread adoption of such practices by linking them directly to economic or technological investments that are made to support a sustainable path for economic growth. To ensure that high- performance work practices diffuse more broadly across the economy and produce benefits for both employers and employees, we propose that these efforts be sponsored jointly by the Department of Commerce and the Department of Labor.

### References

<sup>2</sup>Horgan, J., Muhlau, P. (2006). Human resource systems and employee performance in Ireland and the Netherlands: A test of the complementarity hypothesis. <u>International Journal of Human Resource Management</u>, 17: 414-439.

<sup>3</sup> MacDuffie, J. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. <u>Industrial and Labor Relations Review</u>, 48: 173-188; Dunlop, J.T., Weil, D. (1996). Diffusion and performance of modular production in the U.S. apparel industry. <u>Industrial Relations</u>, July: 334-355; Ichniowski, C., Shaw, K., Prennushi, G. (1997). The effects of human resource practices on manufacturing performance: A study of steel finishing lines. <u>American Economic Review</u>, 87: 291-313; Batt, R. (1999). Work design, technology and performance in customer service and sales. <u>Industrial and Labor Relations Review</u>, 52: 539-564; Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A.L. (2000). <u>Manufacturing Advantage: Why High-Performance Work Systems Pay Off.</u> Ithaca, NY: ILR Press.

<sup>4</sup> Youndt, M.A., Snell, S., Dean, Jr., J.W., Lepak, D.P. (1996). Human resource management, manufacturing strategy, and firm performance. <u>Academy of Management Journal</u>, 39(4): 836-866; Ichniowski, C., Shaw, K., Prennushi G. (1997). The effects of human resource practices on manufacturing performance: A study of steel finishing lines. <u>American Economic Review</u>, 87: 291-313.

<sup>5</sup> MacDuffie, J. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. <u>Industrial and Labor Relations Review</u>, 48: 173-188.

<sup>6</sup> West, M., Borrill, C., Dawson, J., Scully, J., Carter, M., et al. (2002). The link between the management of employees and patient mortality in acute hospitals. <u>International Journal of Human Resource Management</u>, 13: 1299-1311.

<sup>7</sup> Huselid, M. (1995). The impact of human resource management on turnover, productivity and corporate financial performance. <u>Academy of Management Journal</u>, 38: 635-72; Delery, J.E., Doty, D.H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. <u>Academy of Management Journal</u>, 39(4): 802-35; Collins, C., Smith, K. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. <u>Academy of Management Journal</u>, 49(3): 544-560.

Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A.L. (2000). <u>Manufacturing Advantage: Why High-Performance Work Systems Pay Off.</u> Ithaca, NY: ILR Press; Bartel, A.P. (2004). Human resource management and performance outcomes: Evidence from retail banking. <u>Industrial and Labor Relations Review</u>, 57: 181-203; Wright, P.M., Gardner, Moynihan, L. (2006). Impact of

<sup>&</sup>lt;sup>1</sup> Becker, B., Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. <u>Academy of Management Journal</u>, 39(4): 779-80; Bailey, T., Berg, P., Sandy, C. (2001). The effect of high-performance work practices on employee earnings in the steel, apparel, and medical electronics and imaging industries. <u>Industrial and Labor Relations Review</u>, 54: 525-544; Ramsey, H., Scholarios, D., Harley, B. (2000). Employees and high-performance work systems: Testing inside the black box. <u>British Journal of Industrial Relations</u>, 38: 501-532; Ichniowski, C., Kochan, T., Levine, D., Olsen, C., Strauss, G. (1996). What works at work: Overview and assessment. <u>Industrial Relations</u>, 35: 299-333.

HR practices on the performance of business units. <u>Human Resource Management Journal</u>, 13(3): 21-36.

<sup>9</sup> Cappelli, P., Neumark, D. (2001). Do high performance work practices improve establishment level outcomes? Industrial and Labor Relations Review, 54: 737-775.

<sup>10</sup> Ichniowski, C., Shaw, K., Prennushi, G. (1997). The effects of human resource practices on manufacturing performance: A study of steel finishing lines. <u>American Economic Review</u>, 87: 291-313.

<sup>11</sup> Batt, R. (1999). Work design, technology and performance in customer service and sales. <u>Industrial and Labor Relations Review</u>, 52: 539-564.

<sup>12</sup> Gittell, J.H. (2003). <u>The Southwest Airlines Way: Using the Power of Relationships to Achieve High Performance</u>. New York: McGraw-Hill; Gittell, J.H. (2001). Supervisory span, relational coordination and flight departure performance: A reassessment of post-bureaucracy theory. Organization Science, 12(4): 467-482.

<sup>13</sup> Richard, O.C., Johnson, N.B. (2004). High performance work practices and human resource management effectiveness: Substitutes or complements? <u>Journal of Business Strategy</u>, 21(2): 133-148.

<sup>14</sup> Gittell, J.H., Seidner, R., Wimbush, J. (2009). A relational model of how high performance work systems work. <u>Organization Science</u>, forthcoming.

<sup>15</sup> Cutcher-Gershenfeld, J., (1991). "The impact on economic performance of a transformation in workplace relations," <u>Industrial and Labor Relations Review</u>, 44, 2, 241-260; Collins, C.J., Clark, K. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. Academy of Management Journal, 46: 740-751.

<sup>16</sup> Gibbert, M. (2006). Generalizing about uniqueness: An essay on an apparent paradox in the resource-based view. <u>Journal of Management Inquiry</u>, 15: 124-134; Fried, V.H., R.D. Hisrich (1994). Toward a model of venture capital investment decision-making. <u>Financial Management</u>, 23(3): 28-37; MacMillan, I.C., Zemann, L., Subbanarasimha, P.N. (1987). Criteria distinguishing successful from unsuccessful ventures in the venture screening process. <u>Journal of Business Venturing</u>, 2: 123-138; Snell, S.A., Dean, J.W. (1992). Integrated manufacturing and human resource management: A human capital perspective. <u>Academy of Management Journal</u>, 35: 467-504; Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. Academy of Management Journal, 45: 587-598.

Osterman, P. (1988). Employment Futures: Reorganization, Dislocation and Public Policy.
 New York: Oxford University Press; Mahoney, T.A., Watson, M.R. (1993). Evolving modes of workforce governance: An evaluation. In B.E. Kaufman, M.M. Kleiner (eds.), Employee
 Representation: Alternatives and Future Directions, 135-168. Madison, WI: Industrial Relations
 Research Association, University of Wisconsin; Tsui, A.S., Pearce, J.L., Porter, L.V., Hite, J.P. (1995). Choice of employee-organization relationship: Influence of external and internal organizational factors. G.R. Ferris (eds.), Research in Personnel and Human Resource
 Management, 13: 117-151. Greenwich, CT: JAI Press; Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A.L. (2000). Manufacturing Advantage: Why High-Performance Work Systems Pay Off. Ithaca, NY: ILR Press.

Nahapiet, J., Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. <u>Academy of Management Review</u>, 232: 242-266; Tsai, W., Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. <u>Academy of Management</u>

Review, 41: 464-476; Leana, C.R., Van Buren, H.J. (1999). Organizational social capital and employment practices. Academy of Management Review, 24: 538-555; Levin, D.Z., Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. Management Science, 50: 1477-1490; Gittell, J.H. (2000). Organizing work to support relational coordination. International Journal of Human Resource Management, 11:517-39; Gittell, J.H., Seidner, R., Wimbush, J. (2009). A relational model of how high performance work systems work. Organization Science, forthcoming.

<sup>19</sup> Leana, C.R., Pil, F. (2006). Social capital and organizational performance: Evidence from urban public schools. <u>Organization Science</u>, 17(3): 353-366; Gittell, J.H. (2000). Organizing work to support relational coordination. <u>International Journal of Human Resource Management</u>, 11:517-39; Pil, F., Leana, C.R. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. <u>Academy of Management Journal</u>, forthcoming; Gittell, J.H. (2009). <u>High Performance Healthcare:</u> <u>Organizational Practices That Ensure Quality, Efficiency and Resilience</u>. New York: McGraw-Hill, forthcoming.

<sup>20</sup> Rubinstein, S.A. (2006). Collaborative community and employee representation. In P. Adler and C. Heckscher (eds.), <u>The Firm as Collaborative Community: Reconstructing Trust in the Knowledge Economy</u>, Oxford University Press: 334-352; Appelbaum, E., Hunter, L. (2005). Union participation in strategic decisions of corporations. In R. Freeman and L. Mishel (eds.), <u>Emerging Labor Market Institutions for the 21<sup>st</sup> Century</u>, Cambridge, MA: National Bureau of Economic Research: 265-291. Kochan, T.A., Eaton, A.E., McKersie, R.B, and Adler, P. <u>Healing Together: The Kaiser Permanente Labor Management Partnership</u>, Ithaca, NY: Cornell University Press, forthcoming 2009.

Gittell, J.H., von Nordenflycht, A., Kochan, T.A. (2004). Mutual gains or zero sum? Labor relations and firm performance in the airline industry. <u>Industrial and Labor Relations Review</u>, 57(2): 163-179. Eaton, A.E., Voos, P.B. (1992). Unions and contemporary innovations in work organization, compensation and employee participation. In P. Voos and L. Mishel (eds.), <u>Unions and Competitiveness</u>, Armonk, NY: M.E. Sharpe; OECD, <u>1999 Employment Outlook</u>.

<sup>22</sup> Black, S., Lynch, L. (2004). What's driving the new economy: Understanding the role of workplace practices. <u>Economic Journal</u>, 114(493), F97-116; Coats, D. (1999). <u>Speaking Up! Voice</u>, <u>Industrial Democracy and Organisational Performance</u>, The Work Foundation.

<sup>23</sup> MacDuffie, J.P. and Kochan, T.A. (1995). Do U.S. firms invest less in human resources?

Training in the world auto industry. <u>Industrial Relations</u>, 34:147-168; Freeman, R.B. and Rogers, J., <u>What Do Workers Want</u>? Ithaca, N.Y. Cornell University Press, 1999; Appelbaum, et al, <u>Manufacturing Advantage: Why High-Performance Work Systems Pay Off</u>; Kochan, et al, <u>Healing Together: The Kaiser Labor Management Partnership.</u>