

# The Modern Economic Development Model: A Roadmap for Economic Development Using Iraq as a Case Study

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*Using recent post-conflict efforts in Iraq, this paper proposes a new model for attaining a sustainable economy in fragile states called the Modern Economic Development Model. This model focuses on seven major factors that are essential for a state to achieve a sustainable economy: human capital development, employment generation, infrastructure development, building a reliable financial system, legislative and regulatory framework, macroeconomic stability, international trade and integration. When this model is applied to the reconstruction efforts in Iraq, it is clear that progress was made when the seven factors were addressed, yet the sporadic changes and lack of foresight caused the international community to stray from the seven basic factors that must be developed. In the future, it is imperative that the Iraqi people continue to develop their economy based on the seven principles listed above in order to take the final steps to achieve a sustainable economy.*

**A**fter the invasion of Iraq, there was no clear vision for the future as the United States had not planned for a lengthy occupation or reconstruction. U.S. Representative Nita Lowey summed up the situation when she said, “We were told that we would be welcomed with open arms by the Iraqi people and that Iraqi government institutions would be restored after a short hiatus. The vision of postwar reconstruction presented to Congress at that time was for many of us hopelessly naïve or grossly incompetent.”<sup>1</sup> Iraq has slowly risen out of the ashes and now stands on the edge of economic sustainability. The experience and lessons learned from the ongoing Iraqi reconstruction suggests a roadmap for future success in Iraq and elsewhere.

Economic reconstruction is a crucial part of rebuilding any state because without a strong economy, there is little hope for a better future. This paper focuses solely on the economic piece of Iraqi reconstruction, but it is impossible to completely separate the political, social, and military components of development from the economic factors. Achieving a sustainable economy in post-conflict and fragile states, requires countries to focus on seven development factors: human capital development, infrastructure development, a reliable financial system, employment generation, legislative and regulatory framework, macroeconomic stability, and international trade and integration. Each of these factors should be addressed to allow a fragile economy to become a competitor on the international stage.

This paper introduces a new development model to light the path to a sustainable economy for post-conflict and fragile states. Known as the Modern Economic Development Model, it provides the

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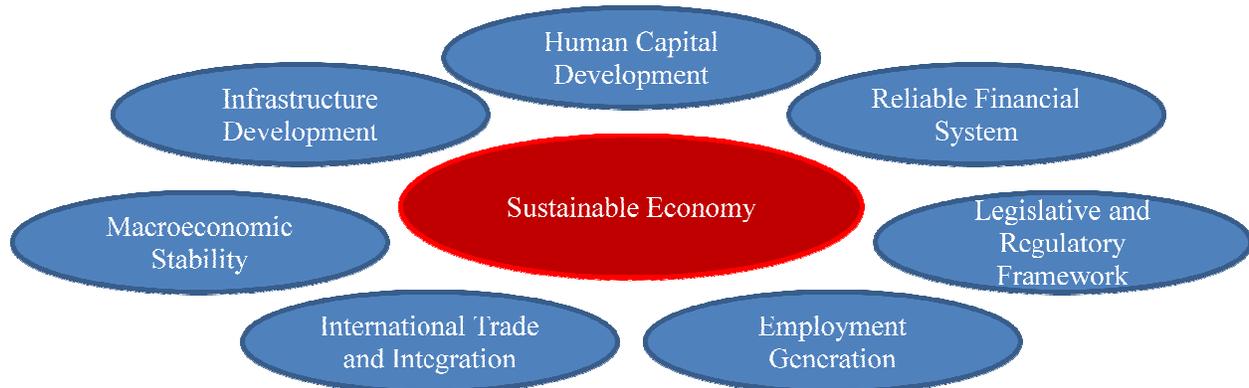
<sup>1</sup> U.S. Representative Nita Lowey, “Statement before the House Appropriations Subcommittee on Foreign Operations, Export Financing and Related Programs Hold Hearing on FY2004 Supplemental: Iraq Reconstruction Funds,” September 24, 2003.

underlying theory of this paper. This model analyzes former and current reconstruction efforts and offers recommendations moving

forward with the final few steps in the long reconstruction process.

### Theory

#### Modern Economic Development Model:



**Sustainable Economy:** A sustainable economy is one in which people can pursue opportunities for livelihoods within a predictable system of economic governance bound by law. Economic governance refers to the collection of policies, laws, regulations, institutions, practices, and individuals that shape the context in which a country's economic activity takes place.

**Human Capital Development:** Increasing the education, job training, and entrepreneurship of a population in order to increase their productive and intellectual potential.

**Employment Generation:** Creating employment opportunities within the private sector to avoid the negative political and social ramifications of prolonged unemployment.

**Infrastructure Development:** Creating a working transportation system, telecommunications network, reliable electrical grid, efficient waterworks, and other facilities required for the economy to operate.

**Reliable Financial System:** Creating a financial structure that ensures easy access to credit, credible deposit institutions, and enables efficient non-cash transactions.

**Legislative and Regulatory Framework:** A system that facilitates the development, oversight, and enforcement of a wide-range of laws governing commerce, labor, and property rights, in addition to suppressing the illicit economy.

**Macroeconomic Stability:** Stability in the form of consistent policy from the governing monetary and fiscal institutions in conjunction with managing inflation, a realistic national budget, and a transparent system of public expenditure.

**International Trade and Integration:** The expansion and diversification of exports and the increasing presence of multi-national corporations that allow access to the global market.

This model is based on the “Sustainable Economy” model in the U.S. Institute of Peace and PKSOI “Guiding Principles for Stabilization and Reconstruction,” USAID’s “Guide to Economic Growth in Post-Conflict Countries,” and author’s own analysis.

This model outlines the seven primary factors that influence the development of a sustainable economy in post-conflict and fragile states. Each of these factors should be addressed; however, the emphasis should be placed on the weakest factors as development progresses.

The Modern Economic Development Model must be implemented under an umbrella of security, yet the two cannot be undertaken separately. In post-conflict and fragile states, security and development projects are often completed by the same entities. Furthermore, should security be in place without a sustainable economy, the society will inevitably revert back to a state of conflict. The same is true if a sustainable economy is implemented in an insecure region: the economy will quickly crumble under violence. Therefore, the establishing of security is a necessary concurrent effort in the process of rebuilding an economy.

Below is an analysis of each of the seven factors and how a fragile state can and should address each.

**Human capital development** requires increasing the education and job training of the population while instilling the ability to be successful entrepreneurs. Human capital forms the base of any economy and is therefore the most important and most difficult of the seven factors. In fragile states, many educated people seek better opportunities in foreign countries, resulting in a brain drain that leaves the already crippled economy without the people needed to put it back together. Thus, training the workforce must be a priority upon the cessation of

hostilities or whenever the country is able to begin the reconstruction process.<sup>2</sup>

Workforce education should focus on two primary objectives, job training and education for the future.<sup>3</sup> Job training teaches the skills necessary to accomplish a specific job while education refers to the expansion of general education that can emphasize certain disciplines, such as information technology. Broad-based education enables people to be flexible and innovative in their endeavors rather than being experts in only one particular field. This two pronged approach will be a bridging strategy meeting short-term demand while preparing for the future.

An often overlooked aspect of human capital is the degree to which both genders are included in the education system.<sup>4</sup> If a state fails to educate the female population, they are denying the development of roughly half of their human capital base and are therefore already handicapped when competing with the international community. A final requirement of developing human capital is creating a class of innovative entrepreneurs who are willing to take risks and move the economy forward. Without a constant stream of these new ideas and businesses, the economy will stagnate. Job training and education should emphasize how to open and operate a business while also trying to make

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<sup>2</sup> USAID, “A Guide to Economic Growth in Post-Conflict Countries,” January 2009.

<sup>3</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

<sup>4</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

students think creatively to solve the problems of the future. Reliable financial capital is essential to supporting entrepreneurial development by funding educational investments and providing starting capital to skilled professionals seeking to establish small businesses. Therefore, human capital can be improved but will not fully develop until other essential elements in the economy are operating as well.

**Employment generation** requires the establishment of employment opportunities to avoid the negative political and social ramifications of prolonged unemployment. One characteristic of fragile states is a broken socio-economic structure, leading to widespread unemployment. Employment is essential to maintaining social tranquility by creating hope for the future while simultaneously allowing money to circulate through the economy. Another benefit of employment that becomes apparent in post-conflict fragile states was described by Dr. Ayad Allawi, "To provide security you need to engage people. You need to tackle unemployment. You need to create job opportunities, substantial opportunity so people would be more involved in their well-being rather than explosives and insurgency."<sup>5</sup> Clearly, there are many consequences to prolonged unemployment so employment should be an early priority of the reconstruction effort.

Some fragile states suffer from internally displaced persons (IDPs) due to war, famine or civil unrest. Frequently the IDPs will over-burden the local infrastructure of the area they now occupy. The government should use this large force of unemployed people to construct suitable infrastructure and similar public works projects that have a direct impact on employment. The

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<sup>5</sup> SIGIR interview with Dr. Ayad Allawi, former Prime Minister of Iraq, February 25, 2008.

government needs to create programs for short-term employment that take people off of the streets while also beginning to push money through the system. Once money is flowing in the economy and private sector employment opportunities begin to emerge, the government must shift focus to long-term human capital development to make employment more self-sustaining.

With large numbers of unemployed people, the two major sectors that should be the focus of job training and government assistance are agriculture and construction.<sup>6</sup> The agricultural market needs support in staving off famine and ensuring that the country does not drain precious resources importing food. The government should recruit farmers, issue vouchers for tools, loans for land, seeds, and, most importantly, provide food or money that will sustain the farmers between harvests.<sup>7</sup> Once farmers weather the first season, the government assistance should begin to fade as the sector should be self-sustaining.

The construction sector is required because it has the potential to put a large number of unskilled laborers back to work. The government should focus on recruiting and reintegrating former enemy combatants into such jobs as basic construction work on public works projects. The benefits of reintegrating enemy fighters are that they now have a stake in the country, adding valuable human capital. Additionally, often key infrastructure and buildings are damaged or destroyed during the conflict. The large numbers of unskilled laborers would be able to rebuild much of the damage, further enabling the county to grow.

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<sup>6</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

<sup>7</sup> USAID, "A Guide to Economic Growth in Post-Conflict Countries," January 2009.

**Infrastructure development** involves the establishment of a working transportation network, functional telecommunications, reliable electrical grid, efficient waterworks and the construction of other facilities required for the economy to operate.<sup>8</sup> A well developed infrastructure enables people, goods, and ideas to effectively traverse the country, in addition to fulfilling the basic needs of both the population and businesses.

A post-conflict state will likely have a badly damaged infrastructure that must be rebuilt to allow the economy to reach full potential. In these instances, the three areas that must be prioritized are electricity, transportation networks, and telecommunications.<sup>9</sup> A reliable electrical grid will enable businesses to operate. Every time the electrical grid goes down in today's economy, businesses are frozen, resulting in massive financial losses while destroying the attractiveness of the country to foreign investors. The transportation networks are essential in moving goods and raw materials to markets and manufacturers, respectively.

Finally, the telecommunication networks must be operational because in a modern economy, communication is vital. Without reliable telecommunications networks in place supply chains cannot communicate and orders cannot be disseminated. Therefore, to set the stage for economic growth, the country must have a

working infrastructure, at the very least a working electrical grid, transportation networks, and telecommunication system.

Outside of the three primary areas of emphasis for infrastructure development, states must develop the capacity to maintain the current infrastructure.<sup>10</sup> Foreign governments and organizations often finance or even build the needed infrastructure in post-conflict states. However, the infrastructure must be maintained over time. The most effective way to ensure that infrastructure is maintained is to privatize utility companies and the electricity industry. This approach will incentivize new thinking and constant vigilance to maintain the working infrastructure because the company's income would be derived directly from the working systems.

A **reliable financial system** provides citizens and businesses easy access to credit, systems for non-cash transactions, and credible deposit institutions that allow for substantial private savings.<sup>11</sup> A working financial sector is vital to the ability of a fragile economy to recover. In many post-conflict states, the governments are heavily in debt, having borrowed to finance the conflict and the subsequent efforts to rebuild the damaged state. Furthermore, it is likely that the majority of their expert staff will have fled the country, leaving a dangerous gap in the required skills and knowledge to operate a bank in such a volatile situation.<sup>12</sup>

To rebuild the financial system and restore the confidence required to operate effectively, the effort must begin at the lowest

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<sup>8</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

<sup>9</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

<sup>9</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

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<sup>10</sup> USAID, "A Guide to Economic Growth in Post-Conflict Countries," January 2009.

<sup>11</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

<sup>12</sup> USAID, "A Guide to Economic Growth in Post-Conflict Countries," January 2009.

levels. New businesses will require capital to operate, making micro-financing and local banks the early priority in the reconstruction effort; however, with the resurrection of loans comes the necessary oversight. The government will be required to license and supervise all commercial banks immediately and once the financial system has the capacity to resume micro-financing on a large scale, oversight and technical assistance to these institutions will be required to ensure that all agreements are both fair and neither party is mistreated.<sup>13</sup>

Only once the economy is gaining steam should an independent central bank be established to control monetary policy. This bank should be accompanied with an advertised program of deposit insurance can help convince the population that banks are once again a viable option for savings, a perfect role for the IMF or the World Bank.

**A legislative and regulatory framework** refers to the establishment of a system that enables the development, oversight, and enforcement of a wide-range of laws governing commerce, labor, and property rights.<sup>14</sup> The establishment of a simple and enforceable legislative and regulatory framework tackles the microeconomic challenges of ensuring fair competition between firms and individuals, respectively. Essential to the microeconomic stability of a state is ensuring that all contracts are honored, property rights are guaranteed, an efficient legal system, and a climate of fair competition exist. Without ensuring that property rights are enforced, efforts to build a sustainable economy cannot succeed. When states do not honor agreements or enforce

property rights, firms will move elsewhere to avoid losing their investments. Key to the efficient working of the system is the suppression of the illicit economy as it siphons important resources from the economy.

Essential to enabling new business to thrive is the elimination of barriers to opening a business. To streamline the process, the time and number of agencies involved should be minimized. Incorporating a business will further allow a culture of entrepreneurship to flourish in the young economy. In a broader sense, barriers to commerce within the state's economy must be abolished, enabling the movement of goods to larger markets and increasing GDP and per capita income. Barriers to commerce can also take the form of harsh taxes which must be diminished to eliminate distortions and to encourage economic activity. Thus, the government must institute simple, favorable internal commerce and tax codes so that wealth can move rapidly around the country without undue government interference.

Skepticism of government operations will be exacerbated in post-conflict and fragile states, requiring the government to take measures to ensure transparency in the regulatory process. All contracts and hearings should be open to the public and all information should be made available in order to fight the malignant perception of corruption that can destroy the system before it has a chance to mature.

In fragile states, especially during and after violent conflicts, a strong illicit economy will likely be present since it often provides the means of survival to some citizens. While there are several benign components to the illicit economy, there will likely be a strong network of black market activities that take advantage of the instability, expending crucial resources and capital while prolonging the

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<sup>13</sup> USAID, "A Guide to Economic Growth in Post-Conflict Countries," January 2009.

<sup>14</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

instability.<sup>15</sup> In order for a country to establish the stability and economic environment necessary for a successful economy, illicit economic activity must be suppressed. Aggressive law enforcement should target the finance networks for drug trafficking, organized crime, and local power brokers

**Macroeconomic stability** requires consistent policies from the governing monetary and fiscal institutions in conjunction with a low inflation rate, a realistic national budget, stable prices, and a transparent system of public expenditure. The two most important goals of macroeconomic policy are price stability and low inflation.

Fiscal institutions must first control expenditures by creating a realistic national budget and adhering to it. The government must demonstrate predictability and the ability to control spending, helping restore confidence in the government and contributing to price stability. The tax system should be simplified and minimized so that the economy can function with minimal government distortion. Finally, a transparent fiscal authority must be established to oversee the needed changes and conduct constant oversight of budget initiatives.

A governing monetary institution must be established independent of the central government to control prices free from political influence. This institution should take the form of a central bank. The central bank would then be the licensing and governing body over commercial banks to ensure that they are operating legally and prudently. Finally, the most effective system for exchange rates and currency must be determined. A national currency can be

adopted to enable independence for the central bank. This policy is best if foreign aid comprises a large amount of GDP because this can cause adverse shocks to the money supply. On the contrary, adopting a foreign currency such as the US dollar automatically restricts inflation and enables easy trading with that partner.<sup>16</sup>

**International trade and integration** is essential for the long-term economic health of a state. Expansion into international markets requires the diversification of exports with an increasing presence of multi-national corporations that allow access to the global market. Vital to creating a state that is competitive internationally is breaking down trade barriers, and simultaneously creating the necessary infrastructure to quickly transport goods from the interior of a country to the borders. In many fragile states, the borders must be secured to be sure that there is no illicit trade over the border and that imports and exports can flow freely. Additionally, the state should have a diversified economy so that the economy is not tied to the fate of the market for a particular commodity. Also, relationships with neighboring states should be cultivated to create a culture of regional economic cooperation that will expedite local trade and open up larger markets for each state.<sup>17</sup>

To be fully integrated into the world economy, a state must attract the investment and relocation of large, multinational corporations. To attract these firms, states must first create financial incentives such as tax breaks. The state would also benefit from choosing one particular industry to attract so

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<sup>15</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009), 9-144.

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<sup>16</sup> U.S. Agency for International Development, "USAID: A Guide to Economic Growth in Post-Conflict Countries," January 2009.

<sup>17</sup> United States Institute of Peace and United States Army Peacekeeping and Stability Operations Institute, *Guiding Principles for Stabilization and Reconstruction*, (Washington, DC: United States Institute of Peace Press, 2009).

that it can specialize in providing benefits tailored to that industry. A particular industry does not imply one single commodity, but rather expands to a larger umbrella of connected products that will maximize comparative advantage in a given sector. Before a foreign company can even consider moving to an emerging state, the state must have a reputation of enforcing property rights and contracts. To develop the environment required to attract investment, the state must ensure that the economy is more focused on technology than production. If a country is only an efficient, cheap producer, the state will inevitably be used as a large factory, driving the state into the rut of slow growth that has characterized much of the developing world. That said, if a country does not have the capacity to manufacture its own goods, the economy will not be able to sustain itself in the long-run. Therefore, this framework advocates a largely free trade approach in conjunction with limited elements of managed trade in order to foster growth in the exporting sector.

In order for a state to succeed in the modern economy, states must be able to find their niche among the global powers; whether this niche is the result of natural resources or a product of a state carving its own place, forward thinking leaders are an absolute necessity. The challenge is for the leadership to develop advantage in international trading based on their understanding of the country's situation and position in the global economy.

The Modern Economic Development Model described above offers the basic components that must be addressed to achieve economic success for post-conflict and fragile economies. With this understanding, the proposed model can be illustrated using the Iraqi reconstruction effort.

### **Reconstruction Assessment of Iraq**

Iraq still suffers from sporadic violence aimed at destabilizing the government by undermining efforts to rebuild international confidence in the Iraqi economy. GDP growth has averaged 2.2 percent per year since the invasion, leaving the per capita income below pre-war levels. Recently, GDP growth has accelerated, but this is a product of the increasing oil revenues while the manufacturing and agricultural sectors struggle due to low private investment. Oil production drives the economy, accounting for over half of GDP while the manufacturing sector is tiny in comparison at approximately 4% of non-oil GDP. Roughly 12.5% of the population in 2009 was dependent on government food rations for sustenance. The problem is exacerbated by the steadily declining agricultural sector which has fallen well below population growth in recent years. The economic infrastructure hinders growth of the economy as a whole. Chief among the problems remains electricity production as the power grid is both unreliable and undersupplied. The transportation networks are largely rehabilitated but require constant vigilance due to the ongoing conflict and expansion needed to foster economic conditions necessary for large-scale foreign investment in non-oil related goods and services. Finally, the conflict led to an exodus of the most qualified teachers and physicians, leading to struggling schools and an overburdened healthcare infrastructure. The knowledge gap that emerged in their absence has yet to be filled.<sup>18</sup>

Given the current economic assessment of Iraq, it is clear the reconstruction that began following the 2003 invasion has steadily progressed, leaving Iraq on the threshold of creating a sustainable economy and entering the global economy. By analyzing the steps that the Iraqi government,

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<sup>18</sup> USAID, "Iraq: Economic Recovery Assessment," February 2009, [http://pdf.usaid.gov/pdf\\_docs/PNADO182.pdf](http://pdf.usaid.gov/pdf_docs/PNADO182.pdf) (accessed July 28, 2010), 7-8.

the United States' government, and non-governmental organizations took to rebuild the Iraqi economy, it will be possible to illustrate the utility of the seven factor model in producing strong post-conflict economies.

Even before the invasion of Iraq in 2003, the United States was planning for the reconstruction of Iraq, yet it remained widely accepted that there would be a rapid hand-off with the provisional Iraqi government.<sup>19</sup> Immediately following the cessation of formal hostilities, agencies such as USAID initiated numerous programs aimed at rebuilding the Iraqi economy. By May of 2003, USAID had already spent \$1.5 billion on an assortment of infrastructure and health care programs. Many experts believed that the reconstruction efforts only needed to be focused on the rebuilding of physical capital in the wake of the conflict, and many of the agencies had no idea the vast amount of resources that rebuilding Iraq would require. James Kunder, the USAID Deputy Assistant Administrator for Asia and the Near East from 2002 to 2004, recognized the apparent gap and exclaimed, "We needed to be thinking at a much different order of magnitude of what is required to reconstruct a failed state, in the context of a U.S. military invasion."<sup>20</sup> Upon entering Iraq, the aid agencies lacked direction and a clear set of objectives beyond trying to solve immediate problems. Therefore, many of the initial reforms were aimed not at future success but immediate relief from the economic struggles.

Despite the initial chaos, once aid agencies settled in, each of the seven factors was addressed, rebuilding the damaged economy. Each of the seven factors will be analyzed with respect to the progress made

during reconstruction and the current state of affairs. Flows of money will be highlighted, providing insights regarding reconstruction priorities.

In any post-conflict situation, before the factors of development can be addressed, it is essential that sufficient security is in place for an economy to develop and prosper. Without security throughout the process, economic developments are easily destroyed and a free market economy cannot function. To this end, the policy of disbanding the Iraqi Army by the Coalition Provisional Authority was extremely costly in terms of the level of national security. Rather than completely disbanding the army, a fairly rapid phasing out of Saddam loyalists within the officer corps would have been more effective. Similarly, the immediate de-Baathification of the country left a void in the leadership as many of the technical experts in the country belonged to the Baath party. Thus, policy only exacerbated the human capital problems in the fragile state.

### **Human Capital Development:**

Unfortunately, most reconstruction programs did not specifically target human capital development within Iraq, but rather attempted to rebuild the physical damage that was far more visible. Money for schools and vocational training centers was sparse at best. Gradually, however, schools began to open as teachers were recruited but only on minimal wages since the amount of money for education remained a far lower priority than the physical development of the country, despite the 40% increase in funding from between 2004 and 2005.<sup>21</sup> The most damaging result of the conflict was the massive brain drain that occurred as experts fled the country. According to the August CRS report

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<sup>19</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 7.

<sup>20</sup> SIGIR interview with James Kunder, USAID Acting Deputy Administrator, February 15, 2008.

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<sup>21</sup> Office of Management and Budget, "Section 2207 Report: Funding Table," July 2004; and Department of State, "Section 2207 Report: Status of Funds," July 2005.

on Iraqi reconstruction, roughly 2.4 million Iraqis fled the country, including 8,000 doctors after 2003; meanwhile, over 300 teachers have been killed since 2006.<sup>22</sup> The cumulative impact of these losses is a frustrating lack of experts, made worse by the lack of initial emphasis on education.

Despite the lag in emphasis, Iraq retained a fair amount of human capital in the form of an educated populace with a 58% literacy rate and a cultural inclination to entrepreneurship.<sup>23</sup> With the assistance of various NGOs in 2006, education expanded further, being a model of inclusiveness and raising the literacy rate to 74.1% in 2010.<sup>24</sup> The steady increase in human capital expanded the potential success of the economy. Regrettably, the initial lag in funding and emphasis in education had visible repercussions in the slow progress of the economy during the first several years of reconstruction.

Many job training programs have emerged in Iraq in recent years, yet after the initial invasion, job training measures and support were minimal at best. Due to the lack of emphasis, many Iraqi citizens did not have the skills needed to be able to compete with foreign nationals in the labor market.<sup>25</sup> The absence of these skills is also a result of the United States contracting foreigners to do such jobs as waste disposal. Once the United States recognized the opportunity for locals to develop the skills and experiences necessary

for future work, such jobs were turned over to the Iraqi people.

In Iraq, the flight of a large number of experts left the country short of the technical expertise needed to rebuild the economy. To address this shortage, the United States should have created large-scale work-force development programs aimed at vocational training in addition to broader education reforms. To accomplish these lofty objectives rapidly, the CPA should have prioritized the construction of numerous new schools and job training centers, and also paid for experts to teach students when needed. These efforts should have the funding necessary to make an impact on the economy within one to two years. These programs would have enabled the long-term growth and sustainability of the Iraqi economy. Human capital is difficult to address since the impact will be gradual, dispersed, and can be many years away from truly being effective. These considerations make human capital development a long-term solution that was incompatible with the appetite for clear improvement in the eyes of the United States government.

### **Employment Generation:**

In the wake of the conflict, there was a spike in unemployment, reaching 18% in the official reporting in 2006.<sup>26</sup> In response to the immediate spike, the newly formed provincial government and the United States Army began large infrastructure development projects such as USAID's Bechtel contract aimed specifically at putting people back to work and rebuilding key infrastructure.<sup>27</sup> These programs were working in the microcosms in which they existed, but they were on the whole too small to effectively jump-start the economy or even give people

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<sup>22</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 11.

<sup>23</sup> Frontline, "Iraq: Truth and Lies in Baghdad," November 2002, PBS, <http://www.pbs.org/frontlineworld/stories/iraq/facts.html> (accessed July 31, 2010).

<sup>24</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (accessed July 29, 2010).

<sup>25</sup> USAID, "Tijara Provincial Economic Growth Program," August 7, 2009, <http://www.usaid.gov/iraq/accomplishments/tijara.html> (accessed 30 July 2010).

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<sup>26</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (accessed July 29, 2010).

<sup>27</sup> SIGIR, "Iraq Reconstruction: Lessons in Contracting and Procurement," July 2006, 32.

much hope of finding permanent employment. In the later phases of reconstruction, despite the efforts of many public works programs, unemployment remained at approximately 15.2% in 2008.<sup>28</sup>

Starting in 2004, USAID instituted agriculture job creation that achieved great success in the beginning. Short-term provision of fertilizer, tools, fuel, and seeds jump-started the industry while long-term reforms reclaimed land and water resources. Iraq's agriculture sector grew rapidly as new research was funded to further aid the industry. By the time the USAID program ended in 2006, Iraq's agricultural industry had greatly improved and generated numerous new jobs, but it was still not enough to completely modernize the farms due to infrastructural failures.<sup>29</sup> As Iraq's second largest economic activity, agriculture has the capability of employing roughly 25 to 30% of the population. Nonetheless, due to the gross underfunding of agricultural programs, production has plateaued again.<sup>30</sup>

In creating a self-sustaining employment market, the CPA should have focused on the agricultural sector due to its innate potential. To rebuild the Iraqi agricultural industry, the Iraqi government should have subsidized the purchase of tools, seeds, and land, while providing for farmers during the first few seasons. The CPA attempted all of the above but did not dedicate sufficient funds to completely rebuild an entire sector of the economy. Agricultural initiatives were not as well funded as public

works and infrastructure projects; however, the rehabilitation of the sector was able to offer sustainable jobs despite the cutbacks. Currently, the agricultural sector employs 21.6% of the labor force.<sup>31</sup>

The construction sector was not emphasized as a source of employment until 2004. In the second major Iraq funding bill passed by the U.S. Congress, \$12.6 billion was devoted to construction projects; creating employment opportunities for many Iraqi citizens hired by the multitude of companies awarded these contracts.<sup>32</sup> The construction sector in Iraq grew primarily out of necessity as the central government did not focus on specific job training for construction workers yet the sheer demand for buildings created its own supply.

Rebuilding the construction and basic services industries would require significant investment in human capital and in large government institutions that could be privatized over time. These would combine to create a supply of skilled labor and a temporary demand for labor that would later be transformed into private ownership. Additionally, such programs would supplement vocational training by providing a project to create the necessary experience to be competitive on the global market. To this end, there should have been far fewer foreigners rebuilding Iraq, leaving the actual groundwork to those who have the most to benefit by participating in the project.

Long-term sustainability and job training initiatives began on a large scale in 2006, yet results are just beginning to emerge. One of the largest of these programs was the

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<sup>28</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (accessed July 29, 2010).

<sup>29</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 284.

<sup>30</sup> USAID Audit E-267-07-002-P, "USAID/Iraq's Agriculture Reconstruction and Development Program," January 22, 2007, 2; and USAID Report RAN-C-00-04-00002-00, "Final Report: Agriculture Reconstruction Development Program for Iraq," December 2006, 337.

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<sup>31</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 31, 2010).

<sup>32</sup> Office of Management and Budget, "Section 2207 Report," January 2004; and SIGIR, "Lessons Learned Forum: Program and Project Management," April 12, 2006.

Community Stabilization Program which sought to start businesses while funding vocational training courses. By 2009, more than 40,200 Iraqis had conducted vocational training through this one program alone. The longer-term battle against unemployment has proven difficult for the fragile state as unemployment stands at 15.2%, well above the world average.<sup>33</sup>

One of the early problems with employment generation efforts was that the public works projects intended to generate employment did not address the capacity-building problems that plagued the Iraqi economy. Once these programs ended, little or no further employment was generated by these efforts. Only recently were the needed vocational training programs established on the scale necessary to make the labor force competitive in the global market. Concurrently, the failure to provide easy access to capital stifled the entrepreneurship that could have generated substantial employment opportunities free from government direction.

The second concern of the government, which should be occurring at the same time as the education reforms, is the creation of employment opportunities for local citizens. The CPA quickly began many of the necessary short-term employment plans; nevertheless, to meet the short-term employment demands, the CPA should have significantly increased both the scope and the quantity of public works projects. These projects served a dual purpose of putting people back to work while concurrently rebuilding much of the damaged infrastructure.

### **Infrastructure Development:**

Even before security was properly established, the United States began working

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<sup>33</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 30, 2010).

on the badly damaged infrastructure of Iraq. Initially, the programs that were funded covered a wide-range of transportation, sanitation, oil, and electricity networks. However, when the State Department took control of the Iraq Relief and Reconstruction Fund (IRRF), they reallocated resources away from long-term projects in favor of quick, visible improvements. The new priorities became oil production, security, employment, and the development of democracy at the expense of waterworks, electricity, and telecommunications.<sup>34</sup> The prioritization of short-term projects led to long-term difficulties for the Iraqi economy.

The transportation networks within Iraq remain damaged. Many of the roads were refurbished by public works projects, but only 8 out of 1,156 damaged bridges have been repaired to date.<sup>35</sup> Despite the vast number of basic road improvements at the outset of the reconstruction process, the government ceased to sufficiently fund transportation, roads and bridges for maintenance. In 2004, the budget only accounted for \$325 million in transportation contracts, only a tiny fraction of the budget for that year.<sup>36</sup> With the emergence of the CERP funding and the Provincial Reconstruction Teams (PRTs), roads could be financed and rebuilt easily and quickly at the local level.<sup>37</sup> These two programs vastly improved the road networks yet continued maintenance is required to ensure that these improvements do not deteriorate over time.

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<sup>34</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, March 12, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 16.

<sup>35</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, March 12, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 16.

<sup>36</sup> SIGIR, "Iraq Reconstruction: Lessons Learned in Contracting and Procurement," July 2006, 59-60.

<sup>37</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 16.

One of the great failures has been the electrical grid in Iraq. In the immediate aftermath of the invasion, the electrical production per day fell from 4,075 megawatts to only 711 megawatts.<sup>38</sup> The grid was not targeted during the invasion; however, chronic neglect, looting, and the damage done from previous wars left the grid on the verge of collapse. The electrical grid faced two major problems. First, the electrical plants do not have access to enough refined fuel to operate and oil refineries required electricity to operate. Other severe electrical grid problems were the damaged and destroyed electrical towers and control systems.<sup>39</sup> These networks needed to be rebuilt on an unprecedented scale in order to supply the amount of electricity that the growing economy would need. Despite the initial emphasis and immense amount of funding, the electrical grid remains problematic with rolling blackouts being the norm.

In order to rebuild the electrical infrastructure, the United States committed roughly \$14 billion from 2003 to 2004 alone.<sup>40</sup> Much of this money was dedicated to the transportation and control systems for the grid which were ripe targets for insurgents. These attacks led to serious delays and security costs which combined to cause the daily production capacity to rise to only 4,200 megawatts, well short of the 6,000-megawatt goal.<sup>41</sup> One of the many examples of the widespread impact of the damaged electrical grid was the inability of the agricultural industry to fully modernize, as most of the commercial farms lacked electrical power altogether. These farms could not run pumps

or even sustain newborn chickens in poultry farms.<sup>42</sup>

By June of 2004, the US ambassador, John Negroponte, shifted funding to more visible and immediate projects with the idea that money was wasted on the electrical grid without the security in place to protect it.<sup>43</sup> The result was a pause in the development of the electrical grid which caused incapacitating shockwaves throughout the economy. One particularly damaging event was the June 2007 sabotage of eight of the twelve 400-kV transmission lines into Baghdad which all but caused the city to grind to a halt.<sup>44</sup> In recent years, a renewed emphasis has been placed on the electrical grid, raising the production capacity well above pre-invasion levels. Despite the increase in production, the state still suffers from occasional blackouts and is required to import roughly 11% of its electricity.<sup>45</sup>

Telecommunications were a rarely discussed priority of the Iraqi reconstruction effort because of their damaged state. A combined \$1.5 billion was committed to the reconstruction of transportation and telecommunication networks between 2003 and 2004. The result of this funding was the construction of modern telecommunications networks within two years that increased the access nine times what it was under Saddam.<sup>46</sup> The vast majority of these

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<sup>38</sup> International Monetary Fund, "Iraq: Statistical Appendix," August 2007.

<sup>39</sup> CPA, "A Free Iraq's Vision for the Future," October 23, 2003.

<sup>40</sup> Office of Management and Budget, "Section 2207 Report: Funding Table," July 2004; and Department of State, "Section 2207 Report: Status of Funds," July 2005.

<sup>41</sup> GAO Report 04-902R, "Rebuilding Iraq: Resource, Security, Governance, Essential Services, and Oversight Issues," June 28, 2004, 88.

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<sup>42</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 284.

<sup>43</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 10.

<sup>44</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 11.

<sup>45</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 30, 2010).

<sup>46</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, <http://www.sigir.mil/files/HardLessons/>

developments were privatized, allowing the networks to thrive, free from the government bureaucracy. By 2007, with the aid of foreign investors, the number of subscribers surpassed the 14.2 million mark compared to the 900,000 subscribers before the invasion and the mere 1.2 million subscribers in 2003.<sup>47</sup> Another facet of telecommunications is access to the internet. Despite efforts to increase availability, the country is one of the lowest in terms of internet hosts and users.<sup>48</sup>

Initially, the reconstruction of the water and sanitation systems was a high priority with roughly \$4.25 billion dedicated to such projects.<sup>49</sup> Despite the necessity of providing clean drinking water, the U.S. Embassy slashed funding for the water sector by \$1.94 billion in 2004. Waterworks also paid the price for the conflict as \$1.81 billion was diverted from water and power production to pay for security forces to protect the established systems.<sup>50</sup> Nearly every reconstruction bill sacrificed the water infrastructural developments over the next several years.<sup>51</sup> As a direct reflection of these cuts, only an estimated 60% of Iraqis had access to clean water in 2008.<sup>52</sup>

Oil and gas pipelines were an early priority of the reconstruction effort because an

immense portion of Iraqi income is derived directly from oil exports. Additionally, some people believed that these revenues were capable of financing the entire reconstruction effort.<sup>53</sup> Despite the high hopes for the oil revenues, the oil infrastructure was already crippled by years of wars, sanctions, and neglect to the point that even before the invasion, the oil infrastructure was not able to even meet the allowable level of the sanctions.<sup>54</sup> After the invasion, the oil production decreased significantly to the point that Iraq was no longer capable of exporting oil.<sup>55</sup> In addition, in 2003, Iraq was burning off about 60% of the natural gas that was produced with the oil because it did not have the necessary infrastructure to export or consume natural gas.<sup>56</sup> To rebuild the oil capacity, the focus became rebuilding the pipelines and monitoring systems, receiving roughly \$51 billion from 2003 to 2004.<sup>57</sup> This emphasis quickly ran into trouble due to security threats that caused delays in the building of new pipelines and other oil-related facilities and led to the deaths of 138 oil-security and technical employees.<sup>58</sup> Once the security environment changed after the “surge,” many of the in-progress pipelines were completed, leading to significant increases in oil production. Most of these projects were connecting pipelines that

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Hard\_Lessons\_Report.pdf#view=fit (accessed July 30, 2010), 294.

<sup>47</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 319.

<sup>48</sup> “Iraq,” *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 31, 2010).

<sup>49</sup> Office of Management and Budget, “Section 2207 Report,” Funding Table, July 2004; and Department of State, “Section 2207 Report” Status of Funds, July 2005.

<sup>50</sup> Curt Tarnoff, “Iraq: Reconstruction Assistance,” Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 11.

<sup>51</sup> Department of State, “Section 2207 Report,” January 2005, 8.

<sup>52</sup> Department of State, “Iraq Weekly Status Report,” November 5, 2008, 14; Oxfam, “Rising to the Humanitarian Challenge in Iraq,” July 30, 2007, 3.

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<sup>53</sup> Paul Wolfowitz, Deputy Secretary of Defense, in a hearing before the House Appropriations Committee, March 27, 2003.

<sup>54</sup> UN Press Release SC/6492, “Security Council Authorizes Sale of Iraq Oil to Offset Shortfall in Revenues Resulting from Delay in Oil Sales, Drop in Oil Prices,” March 25, 1998; and United Nations Security Council Resolution 1153, February 20, 1998.

<sup>55</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 70.

<sup>56</sup> Energy Information Administration, Department of Energy, “Country Analysis Briefs: Iraq,” August 2007.

<sup>57</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 170.

<sup>58</sup> SIGIR Audit 06-028, “Review of Administrative Task Orders for Iraq Reconstruction Contracts,” October 23, 2006, iii.

enabled major oil fields to produce at or near their maximum capacity. By 2009, Iraq was once again exporting 1.91 million barrels a day, which comprises a large portion of state income but not enough to close the budget gap.<sup>59</sup>

One of the major lessons learned during the Iraqi reconstruction is the importance of maintenance during infrastructure building operations. Many of the large-scale infrastructure projects that were completed in the first few years of the reconstruction effort began to deteriorate by 2007.<sup>60</sup> One example is the Nassriya water treatment plant which was operating at one fifth its intended capacity.<sup>61</sup> As a result of a shortage of funds, expertise, and a general unwillingness to accept the responsibility for the deteriorating infrastructure, it has become commonplace for projects to be transferred to the Iraqi government without formal acceptance of the responsibility.<sup>62</sup> The result is a rapidly weakening infrastructure since neither side is adequately maintaining the essential networks that form the backbone of the growing Iraqi economy.

In Iraq, the continuous shift in emphasis from sector to sector led to the underdevelopment of the electrical grid which remains a major problem. Furthermore, in the reconstruction process, rebuilding the physical infrastructure is vital, but it must be paired with a working capacity-building structure so that after the initial emphasis, the state can sustain the projects. In Iraq, the

United States failed to build the capacity of the Iraqi government to maintain their own infrastructure.

While the human capital and the employment opportunities were being developed, it was also essential to rebuild the infrastructure of Iraq from the start. Even when security was not guaranteed the focus of the infrastructural development should have been on roads, the electrical grid, and telecommunications networks. Security can never be fully guaranteed and while there will be setbacks, progress must be made despite the risks. Initially, unskilled labor could have been used to quickly rebuild many of the roads, bridges, and buildings that were damaged or destroyed during the fighting. To guarantee that the electrical system, or any other infrastructure for that matter, would not deteriorate over time, programs should be established to educate local experts on the design and required upkeep of the projects. This expertise should be paired with sufficient funding so that projects can be maintained over time. To aid in the maintenance and growth of these systems, utilities companies, telecommunications firms, and the electrical grid should be privatized as soon as practical to ensure freedom from the inefficiencies of government bureaucracy.

### **Reliable Financial System:**

At the beginning of the reconstruction effort, the state of the Iraqi financial system was years behind the rest of the world. As John Taylor, the Under Secretary of the Treasury for International Affairs from 2001 to 2005, explained, "The banking system [in Iraq] was in shambles. Electronic transfer of funds, widely made to people in developed countries, was virtually non-existent, making Iraq's payment system the equivalent of a Model-T Ford."<sup>63</sup> Following the 2003 invasion,

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<sup>59</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 31, 2010).

<sup>60</sup> SIGIR, "Report to Congress," April 30, 2007, 147; SIGIR, "Report to Congress," July 30, 2007, 7; SIGIR, Project Assessment 07-103, "Doura Power Station Units 5 and 6," July 18, 2007.

<sup>61</sup> SIGIR, Sustainment Assessment, 07-116, April 28, 2008.

<sup>62</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 14.

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<sup>63</sup> John B. Taylor, *Global Financial Warriors: The Untold Story of International Finance in the Post-9/11*

the financial system quickly collapsed, leaving no way for people to get paid or for new industries to receive the needed credit once the country began to rebuild. In response, USAID contracted BearingPoint to create a state-of-the-art system for the tracking, collection, and dispersal of money in the Iraqi financial system. Despite the efforts of the Western contractors, this program became unworkable because the Iraqi workers rejected the system. The system had been designed by employees in the United States who failed to understand the accounting practices of Iraq.<sup>64</sup> This program is but one instance of the lack of cooperation and understanding that plagued financial reform efforts during the reconstruction.

Despite the difficulties of creating new programs for the Iraqi banking system, the main goals of restoring access to credit, maintaining confidence in the banking system, and establishing a working payment system were all met with some degree of success within months of the collapse. These goals were met largely by the United States supplying the necessary resources for banks to operate.<sup>65</sup> The reform process to create a modern banking system capable of competing in the global market would require many more painful changes. These changes began with the CPA issuing orders to reform the banking system beginning in July of 2003, creating the Trade Bank of Iraq.<sup>66</sup> Unfortunately, many of the Iraqi banks maintained their old practices such as requiring 100% physical collateral despite written guarantees of 50% compensation for any losses incurred on small

business loans by the United States. These entrenched practices slowed economic growth by making access to credit more difficult than necessary.

Eventually, with foreign advisors and assistance, the banking system was modernized. Iraqi citizens still do not have the access to the capital that most developed states require to finance a rapidly expanding economy, yet through programs such as USAID's Tijara Provincial Economic Growth Program, micro-financing has become much more readily available while individual banks adjust to the modern banking system.<sup>67</sup> This program supplies the capital, training, and technical assistance required for Iraqi-owned banks to operate.

As a product of the continued reforms within the Iraqi financial system, the system continues to progress towards a modern banking system. The establishment of an independent Central Bank of Iraq has proven to be successful thus far; now it is only a matter of rebuilding the capacity of the smaller banks that remains a challenge for the development of the financial sector.

### **Legislative and Regulatory Framework:**

As soon as the dust settled on the battlefields, the Coalition Provisional Authority was drafting large numbers of documents that would be the basis of the regulation, oversight, and enforcement of a diverse set of laws. Once the Iraqi government was firmly established, these new laws and regulations restructured everything from the traffic laws to the proper operation of banks.<sup>68</sup> Although these new reforms appeared

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*World* (New York: W.W. Norton, 2007), 200.

<sup>64</sup> SIGIR Audit 08-007, "Efforts to Implement a Financial-Management Information System in Iraq," January 25, 2008.

<sup>65</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 86.

<sup>66</sup> CPA Order Number 40, "Bank Law," September 19, 2003.

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<sup>67</sup> USAID, "Tijara Provincial Economic Growth Program," <http://www.usaid.gov/iraq/accomplishments/tijara.html> (accessed July 31, 2010).

<sup>68</sup> "CPA Official Documents," *The Coalition Provisional Authority*, <http://www.iraqcoalition.org/regulations/#Orders> (accessed July 31, 2010).

flawless on paper, the reality was far different.

The establishment of a new system of enforcing laws and regulations is essential for economic activity to thrive. The transition was hampered partly because there were no Iraqi lawyers or judges involved in the creation of the new legal system.<sup>69</sup> As reforms slowly progressed, the Central Criminal Court of Iraq was established and empowered to try serious offenders with great efficiency. The success of this new court went unnoticed due to the ineffective judicial system throughout the remainder of the country. Large shortages of judges and courts combined with the hesitancy of judges to conduct trials led to only 80 trials occurring nationwide over a seven-month period in late 2003.<sup>70</sup> The obvious lack of law enforcement led to widespread abuse that hindered economic growth and stability.<sup>71</sup>

From the beginning of the provisional Iraqi government, the government was required to have oversight and regulatory powers over local businesses and especially those who received financial assistance. Due to a lack of such oversight and transparency, the CPA mandated an Inspector General in each ministry who reports to an overall Inspector General.<sup>72</sup> These positions were largely ineffective as they were “quintessentially American” in their design.<sup>73</sup>

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<sup>69</sup> Sermid Al-Sarraf, Board of Directors, Iraqi Jurists' Association, Testimony before the Senate Committees on Foreign Relations and Judiciary, June 25, 2003.

<sup>70</sup> Judge Daniel L. Rubini, Senior Advisor to the Ministry of Justice, memorandum to Ambassador Richard Jones, Deputy Administrator, November 29, 2003.

<sup>71</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 210.

<sup>72</sup> “Coalition Provisional Authority Order Number 57,” July 7, 2003, [http://www.iraqcoalition.org/regulations/20040212\\_CPAORD57.pdf](http://www.iraqcoalition.org/regulations/20040212_CPAORD57.pdf) (accessed 31 July, 2010).

<sup>73</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 211.

Due to the substantial differences in the culture of the United States and Iraq, it is important for solutions to be tailored to the problems, not merely taken from the west blindly. Therefore, despite the lofty ambitions and powers entrusted to such individuals, they were unable to combat abuses within the system and or make the system more transparent. Most of the later anti-corruption and oversight initiatives were equally ineffective in curbing the corruption.<sup>74</sup> As the reconstruction continues and different reforms are adopted, the Iraqi government and their US partners have not been able to eradicate the widespread corruption in the Iraqi government which is arguably a product of the early failure to establish anti-corruption norms.<sup>75</sup>

Illicit economic activity under Saddam's regime constituted a sizeable portion of the economic activity. Due to the sanctions and internal restrictions on commerce, a thriving black market oil trade materialized. Once the new government took control, the controls on oil prices caused the resurgence of oil smuggling.<sup>76</sup> Between 2005 and 2006, so much oil was being sold on the black market that roughly 1 million barrels a day of oil went unaccounted for out of the 3 million produced.<sup>77</sup> This oil was being moved across the border to countries such as Jordan where it would then be sold at nearly ten times the price as in Iraq due to government subsidies and restrictions.<sup>78</sup> The insurgency

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<sup>74</sup> Danny L. Athanasaw and Christopher M. Griffith, “Iraq Inspectors General: A Work in Progress,” unpublished, 2008.

<sup>75</sup> Natalia Antelava, “‘Billions Lost’ to Corruption in Iraq,” May 18, 2009 [http://news.bbc.co.uk/2/hi/middle\\_east/8055776.stm](http://news.bbc.co.uk/2/hi/middle_east/8055776.stm) (accessed July 31, 2010).

<sup>76</sup> Vivian C. Jones, “Iraq's Trade with the World: Data and Analysis,” CRS Report for Congress, September 23, 2004, <http://www.fas.org/man/crs/RL32025.pdf> (accessed August 1, 2010), 13-14.

<sup>77</sup> SIGIR, “Quarterly Report to the United States Congress,” July 2007, 79.

<sup>78</sup> Erik Eckholm, “On Iraq's Border, Sailors of the Desert Smuggle Subsidized Gasoline,” *New York Times*, August 21, 2004, A7.

also created a vast market for weapons and an environment ripe for drug trafficking, car theft, antiquities theft, and other illicit economic activities. These networks have been deliberately targeted by the Iraqi government and international forces, but their efforts have been met with only limited success.<sup>79</sup>

Iraq's illicit economy before and during the reconstruction remained extensive and powerful. To properly control the illicit economy, the government needed to shift manpower to the borders, yet there was no surplus manpower available. Consequently, the illicit economy grew and siphoned off important resources and entrepreneurial talent. Once the legitimate economy grew strong enough, citizens had a more viable option for economic success and the illicit economy began to decline. Thus, the incentive structure shifted, converting the entrepreneurial talent that was taking advantage of the system into a strong beneficial force driving economic growth at the lowest levels.

Despite many reforms, in a 2007 assessment the World Bank ranked Iraq 5<sup>th</sup> worst in the world for corruption and 3<sup>rd</sup> worst in terms of rule of law, better only than Somalia and Afghanistan.<sup>80</sup> These rankings reflect the grim reality explained by USAID's 2009 Iraq Economic Recovery Assessment, "At present, governance conditions in Iraq are very poor on a global scale: public administration is weak, red tape is burdensome, the legal and judicial framework is ineffective, and corruption is rampant."<sup>81</sup>

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<sup>79</sup> Phil Williams, "Criminals, Militias, and Insurgents: Organized Crime in Iraq," June 2009, <http://www.strategicstudiesinstitute.army.mil/pdffiles/pub930.pdf> (accessed August 1, 2010).

<sup>80</sup> Daniel Kaufman, Aart Kraay, and Massimo Mastruzzi, "Governance Matters IV: Governance Indicators 1996-2006," World Bank Policy Research Working Paper no. 4280, July 2007; and SIGIR, "Quarterly Report to the United States Congress," April 2008, 34.

<sup>81</sup> USAID, "Iraq: Economic Recovery Assessment," February 2009, [http://pdf.usaid.gov/pdf\\_docs/](http://pdf.usaid.gov/pdf_docs/)

Economic activity simply cannot flourish in an environment where bribes are commonplace and property rights cannot be guaranteed. Therefore, the regulations and legal systems governing economic activity are completely inadequate for the Iraqi economy to be competitive on the international stage.

Reform of the Iraqi legislative and regulatory framework failed largely because of the lack of inclusion of the indigenous population in the operations. If more Iraqi experts were incorporated in the decision process, the new system would likely be more accepted by the Iraqi people and they would work to maintain it since they would have a greater sense of ownership in what they built. The illicit economy is still a source of instability within Iraq and continues to drain resources from the reconstruction effort. Until the illicit economy can be largely controlled and the widespread internal corruption purged, the microeconomic climate will not be conducive to the building of a sustainable economy.

### **Macroeconomic Stability:**

Immediately following the U. S. invasion of Iraq, the Gross Domestic Product (GDP) of Iraq fell by roughly 30%, reflecting the overall economic turmoil. The economic growth rate has fluctuated from 1.5% in 2007 to 9.5% in 2008 while the per capita GDP remains woefully low at \$3,600. These indicators reflect the difficulty that Iraq has had in enacting effective macroeconomic policy.<sup>82</sup> Yet, two important factors in maintaining a stable macroeconomic framework, low inflation and price stability, were both achieved with relative success.

Recognizing the need for well-developed and functional ministries to oversee

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PNADO182.pdf (accessed July 28, 2010), 27.

<sup>82</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 30, 2010).

the many fiscal reforms and the growing bureaucracy, the United States, through agencies such as USAID, instituted programs to train these staff members. These developments were in response to several major fiscal problems, causing corruption and inefficiency to be seen as the norm in dealing with the young Iraqi government. Despite the need for improved pipelines, storage facilities, and the rebuilding of much of the infrastructure around drilling sites, only 23% of the 2006 capital budget was spent in addition to only 3% of the budgeted money available to the Oil Ministry.<sup>83</sup> As a result of the training programs and discussions with the IMF and World Bank advisors, Iraq is making moderate progress creating economic institutions capable of enacting effective fiscal policy.

Another major problem with the current Iraqi fiscal policy is the absence of fiscal federalism. By design, the Iraqi fiscal system should be federalist in nature with a degree of spending being spent by the different provinces and districts rather than being allotted straight from the central government. In actuality, sub-national spending only accounts for roughly 17% of all spending.<sup>84</sup> The lack of fiscal federalism prohibits the budget from being properly applied because of the inability of the central government to see the issues on a smaller scale. The Iraqi solution has been to increase the budget, further exacerbating the government debt.

Transparency in the reconstruction process proved to be an uphill battle from the start. On the reconstruction side, early reports by the media of large amounts of waste and fraud led to the creation of the Special Inspector General for Iraq Reconstruction (SIGIR).<sup>85</sup> Since the establishment of SIGIR, the amount of waste in Iraq decreased noticeably, but the Iraqi government is a different story. The Iraqi government grappled with constant accusations of fraud and often did not maintain enough information to reassure either the West or the Iraqi people. As time progressed, the problem was addressed by the adoption of new policies with the help of foreign agencies that ensured acceptable levels of transparency at all levels of government.<sup>86</sup>

In order to allow the Central Bank of Iraq to operate free from political influence, one of the first orders given by the CPA stated that the Central Bank of Iraq has “the authority to determine and implement monetary and credit policy without the approval of the Ministry of Finance.”<sup>87</sup> This new law enabled the Iraqi Central Bank to control inflation, ensure stable prices, and to exercise control over the country’s interest rates from the beginning without intergovernmental conflict. Despite efforts to turn the system into a free market economy, the endeavors were met with stiff resistance. According to Ali Allawi, the Minister of Trade in 2003, “there was not one [Iraqi] voice raised in support of the CPA’s economic plans,”

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<sup>83</sup> Curt Tarnoff, “Iraq: Reconstruction Assistance,” Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 15.

<sup>84</sup> Esam Younis, Najed Hamody, Halwan Siwaili and Recardo Silva-Morales “Revenue Assignemnt and Fiscal Intergovernmental Issues In The New Constitution Interim Period In Iraq,” *USAID*, December 2007, <http://www.lgp-iraq.org/publications/index.cfm?fuseaction=throwpub&ID=189> (accessed August 1, 2010), 38.

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<sup>85</sup> SIGIR, “About SIGIR,” <http://www.sigir.mil/about/index.html> (accessed July 31, 2010).

<sup>86</sup> SIGIR, “Iraq Reconstruction: Lessons in Contracting and Procurement,” July 2006, 32; and Research Triangle Institute, USAID contract EDG-C00-03-00010-00, Section C, April 11, 2003.

<sup>87</sup> “Coalition Provisional Authority Order Number 18,” July 7, 2003, [http://www.iraqcoalition.org/regulations/20030707\\_CPAORD\\_18\\_Independence\\_of\\_the\\_Central\\_Bank\\_of\\_Iraq.pdf](http://www.iraqcoalition.org/regulations/20030707_CPAORD_18_Independence_of_the_Central_Bank_of_Iraq.pdf) (accessed 31 July, 2010).

showing the chasm that the reconstruction teams had to close on both ends.<sup>88</sup>

With assistance from different international organizations, the Central Bank of Iraq was able to rise to the challenge of maintaining a stable macroeconomic climate. The Central Bank of Iraq has been able to maintain a relatively constant exchange rate against the dollar for the past three years while also stifling inflation since 2006. In 2008 inflation was as low as 2.8%.<sup>89</sup> These two triumphs show the success of monetary policy within Iraq; however, the Iraqi economy has yet to fully capitalize on these two achievements.

Overall, the macroeconomic stability in Iraq provides the necessary environment for the growth of the Iraqi economy. The major areas of concern are the steadily increasing inflation rate, the high but declining unemployment rate, and the major budget gap. In order for Iraq to be fully sustainable without foreign assistance, the budget gap must be closed, people must be put back to work, and inflation should continue to be a focus of the Central Bank of Iraq.

### **International Trade and Integration:**

Under Saddam's government, the economy was limited to producing and exporting oil. Due to lack of emphasis in developing any other sectors of the economy, once the regime fell, the new Iraqi government was faced with an economy with only one major export: crude oil. To make matters worse, the infrastructure for the

exporting of oil was terribly inadequate.<sup>90</sup> These two problems led Iraq to struggle in its efforts to enter into international trade to any large degree in the years following the invasion.

An often overlooked aspect of international trade is the ability for the state to control its borders. Initially, insurgents and smugglers were able to cross the Iraqi border at their leisure. Although recent investments have specifically targeted borders and border control programs,<sup>91</sup> the borders remain largely open for smugglers, causing much heartache for prospective trade partners.

Iraq's sole major export remains crude oil which ties the entire economic well-being of the country to the price of oil. In the aftermath of the conflict, the two major export pipelines were so damaged that no oil was exported from March to June of 2003.<sup>92</sup> In response, the government quickly rebuilt these pipelines and invested in other pipelines to push the oil to foreign markets. Amid frequent attacks and setbacks on the pipelines, the Iraqi government succeeded in reestablishing the export capability of the Iraqi oil industry. During the summer of 2008, the price of oil jumped to over \$140 a barrel, bringing enormous revenue to Iraq. Yet, the subsequent decline in prices led to renewed hardships for the economy.<sup>93</sup> The CPA and USAID made early efforts to diversify the economy; however, their efforts were fruitless as the agriculture industry remained grossly

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<sup>88</sup> Ali A. Allawi, *The Occupation of Iraq: Winning the War and Losing the Peace* (New Haven, CT: Yale University Press, 2007).

<sup>89</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (July 31, 2010).

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<sup>90</sup> UN Press Release SC/6492, "Security Council Authorizes Sale of Iraq Oil to Offset Shortfall in Revenues Resulting from Delay in Oil Sales, Drop in Oil Prices," March 25, 1998; and United Nations Security Council Resolution 1153, February 20, 1998.

<sup>91</sup> Curt Tarnoff, "Iraq: Reconstruction Assistance," Congressional Research Service, August 7, 2009, <http://www.usembassy.it/pdf/other/RL31833.pdf> (accessed July 30, 2010), 4.

<sup>92</sup> SIGIR, *Hard Lessons: The Iraq Reconstruction Experience*, 2009, [http://www.sigir.mil/files/HardLessons/Hard\\_Lessons\\_Report.pdf#view=fit](http://www.sigir.mil/files/HardLessons/Hard_Lessons_Report.pdf#view=fit) (accessed July 30, 2010), 70.

<sup>93</sup> SIGIR, "Quarterly Report to the United States Congress," January 2008, 3.

underfunded and the manufacturing sector lacked the expertise and infrastructure to operate at the level required for international competition.<sup>94</sup> Currently, 84% of Iraq's exports are crude oil, showing the need for increased diversification.<sup>95</sup>

Immediately after the new government was established, one of the first actions taken by the CPA was the creation of the Iraqi Trade Bank to enable the importation of goods and services to Iraq.<sup>96</sup> This new bank was able to finance international trade, but due to the problems with the banking system, the bank did not deliver the expected results. Once Iraq was capable of importing foreign goods, the country quickly rebuilt the necessary infrastructure, both physical and human, to coordinate imports on a grand scale. Iraq primarily imports food, medicine and manufactured goods from Syria, Turkey and the United States. The country's exports roughly yield a balance of trade but that is subject to the market for oil every given year.<sup>97</sup> The inept export infrastructure for non-oil industries is a testament to the blind reliance on oil exports

Due to the improvements in infrastructure and security, potential foreign investors viewed Iraq with much more interest in 2009, yet many regulatory obstacles such as land procurement remain difficult to overcome. From the beginning, the Iraqi government has sought to attract foreign investment into the Iraqi economy, but is only now beginning to

experience much success. This success is undoubtedly a product of modifications to the National Investment Law, events that bring together prospective trade and investment partners, and the privatization of several of the remaining state-owned enterprises.

## Conclusion

While the reconstruction of Iraq offers an excellent case study, the Modern Economic Development Model can be modified to fit other developing economies around the globe. While this model cannot claim to be universally applicable to all scenarios, by focusing on the most dire of the seven primary factors outlined, an economy will be able to once again grow. The model serves as a guide for fragile states in the process of rebuilding their economies in order to once again be competitive on the international stage. It is important to recognize that while creating a sustainable economy is absolutely vital to creating viable state, the state must also be free from conflict, have an effective government, and be socially healthy. All of these factors are completely intertwined: if a major failure in one sector is not addressed, then all of the other sectors will stagnate and decline in a vicious chain reaction. As such, a sustainable economy cannot be built in a vacuum, but is part of a much larger framework for the reconstruction of post-conflict and fragile states.

In a world where terrorist organizations, warlords, and oppressive governments ceaselessly take advantage of fragile states and regions in conflict, the international community must be able to intervene and create the conditions for a stable future. Many countries that emerge from the grip of civil war and internal strife slip back into chaos because they do not have the proper institutions to foster stability. Stability can only be ensured if there is a

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<sup>94</sup> USAID Audit E-267-07-002-P, "USAID/Iraq's Agriculture Reconstruction and Development Program," January 22, 2007, 2; and USAID Report RAN-C-00-04-00002-00, "Final Report: Agriculture Reconstruction Development Program for Iraq," December 2006, 337.

<sup>95</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (August 1, 2010).

<sup>96</sup> CPA Order Number 20, "Trade Bank of Iraq," July 14, 2003.

<sup>97</sup> "Iraq," *CIA World Factbook*, <https://www.cia.gov/library/publications/the-world-factbook/geos/iz.html> (August 1, 2010).

sustainable economy, providing the people with hope for a better future. A state must concentrate on each of the seven components

to ensure that the economy has a firm foundation upon which the seeds of a successful country can be sown.

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