Some Preliminary Findings Regarding Cash Distribution from Mineral Wealth in Mongolia

Bayarmaa, Dashjamts
Graduate School of Economics, Kyushu University

https://doi.org/10.15017/1446206

出版情報：経済論究. 148, pp.39-49, 2014-03-26. 九州大学大学院経済学会
バージョン：
権利関係：

Some Preliminary Findings Regarding Cash Distribution from Mineral Wealth in Mongolia

Dashjamts Bayarmaa†

Index

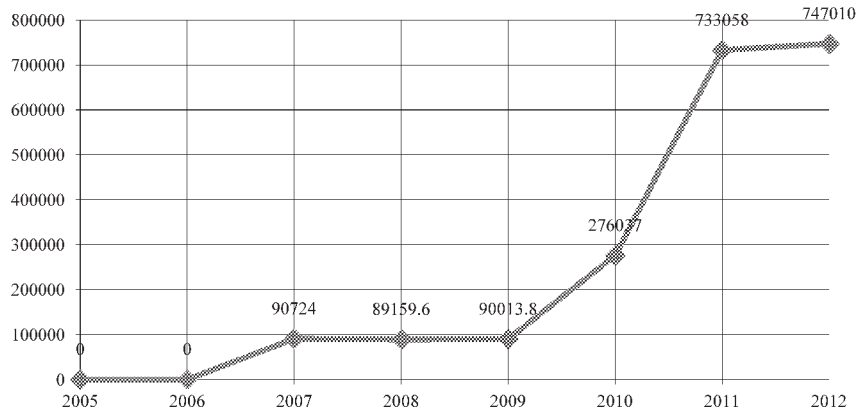
1 . Introduction

Mongolia has rich natural resources and the country's gold, copper and coal reserves are believed to be among the largest in the world. In 2011, the mining and quarrying sector made 70% of gross industrial output with copper and coal exports being the two major sources of tax revenues. By 2011, the production of coal has doubled in two years reaching a record amount of 30.9 million tons. The expectation of revenues from OyuTolgoi (Turquoise Hills) the largest untapped deposit of gold and copper and TavanTolgoi (Five Hills), one of the largest untapped coal deposits on the border with China, led politicians to launch direct and universal cash distribution to every citizen from 2010. More specifically, from established Human Development Fund (HDF) 120 000 MNT (83 USD) was allocated in 2010 and paid in two parts 70 000 and 50 000 MNT, and 21 000 MNT (15USD) has been set to be distributed monthly from January 2011 to June 2012 to every citizen of mongolia. Before HDF allowances in cash were also distributed from 2007 to 2009, but for children under age 18 (Fig.1.). This child allowance money was revived again later in October 2012.

Graphically plotting the monthly statistics from January 2003 to December 2012 will allow us to see any diversions in some social and economic indicators after the cash distribution started in February 2010. Data on health, crime, and price statistics from monthly bulletins of National Statistical Office are used.

† Graduate School of Economics, Kyushu University, Japan.
The author wishes to thank Professor Nobuhiro Horii and Professor Hitoshi Osaka for their helpful guidance. The views and any remaining errors in this paper are those of the author.

Fig.1. Cash distributions including allowances for children under age 18 and Human Development Fund, million togrogs.



Data source: National Statistical Office of Mongolia

2．Literature review

There are several options on how to allocate natural resource revenues, however the decision makers mainly choose between the two options: to spend the money on public projects such as development of infrastructure or to distribute as cash transfers to their citizens. The latter one has become increasingly popular in academic and policy circles (Palley 2003; Tierney 2003; Moss and Young 2009; Segal 2009; Devarajan, Le at al. 2010; Giugale 2011; Devarajan and Giugale 2011), and had been implemented to some degree in locations including Alaska, Latin American countries and recently some African countries and in Mongolia. The proponents point to the experience of Alaska as an example and give the following reasons to choose this way. First, it would help to alleviate poverty and smooth the gap between the poor and rich. Second, it would intensify social monitoring. People will become more interested in how the nation's natural resources have been managed. Third, the direct distribution is preferred because the alternative ways of natural resource revenue handling are worse as politicians are corrupt and unable to spend it properly for public welfare.

However, some economic and social implications following cash distribution are documented as well. Universal distribution of cash can trigger inflation, which in turn erodes the poverty alleviation efforts. It is also arguable whether the distributed wealth would come back to state budget as a tax revenue in a developing country with immature institutions. Furthermore, the evidence of a relationship between adverse health events and additional income receipts has been addressed. Evans and Moore (2009) find that mortality among urban Alaskans increases by 13%

during the week that Permanent Fund Dividend (PFD) payments are received. Dobkin and Puller (2007) examined administrative records for hospital admissions and found that problems associated with substance abuse increase after federal transfer program payments. Foley (2011) finds that crimes increase in the short run as cash transfers from the state government are paid. S. Goldsmith (2002) criticizes Alaska payouts arguing that despite some positive outcomes such as increasing personal income and decreasing the income gap between rich and poor, it changes the relationship between the individual and government. S.Goldschmidt wrote: "...Indeed it matured an entire generation of residents who feel that the government exists to distribute cash to its citizens, while individuals do not need to contribute to public life...This obsession with PFD threatens normal discourse over the state budget, since every issue is viewed through the lens of what its potential impact will be on PFD." Gillies (2010) pointed out that cash transfers may distract attention away from the other methods of effective natural resource management and their allure should not be allowed to monopolize the debate over fiscal and economic affairs.

3 . Cash distribution and health

Mortality, hospital mortality, number of hospitalized people; infant and child mortality monthly data from January 2003 to December 2012 have been examined.

The overall mortality reached its peak in 2010 and then slightly decreased in 2011. Fig.2 indicates a noticeable increase in deaths from February 2010 when the HDF payments were started and at first were paid to the elderly, the disabled, and children.

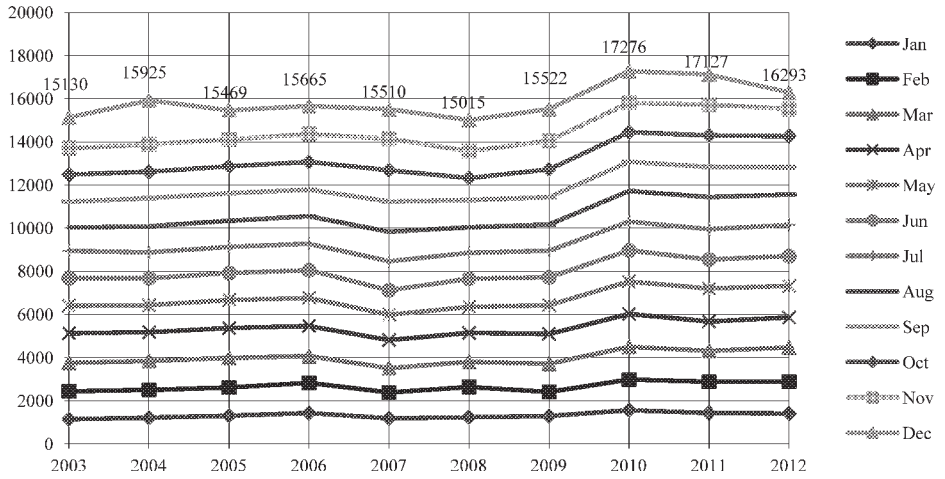
Deaths in hospital in Fig.3 show the same pattern. However, the increase in hospital deaths starts from April 2010, when universal distribution to every citizen followed the limited payments in February 2010.

These findings might indicate that increased consumption following income receipt leads to the increase in mortality as it was stated by Evans and Moore (2012). It is assumed that a sudden spike in certain types of consumption, such as eating heavy meals and drinking alcohol can trigger heart attacks and strokes, result in poisoning, or lead to fatal health deterioration.

The number of people hospitalized also increased in 2010 and this trend continued in 2011. However, the spike has been observed from March 2010 (Fig.4). It is possible that the elderly, the disabled, and children, who started to receive their first part of payment equal to 50 USD from February 2010, mainly spent it on health care they needed in hospitals. As it was mentioned earlier, the HDF payment of 2010 was 83 USD per person. This amount was paid in two parts: 50 USD paid at once in February and April, and remaining 23 USD divided equally into five monthly payments from August to December.

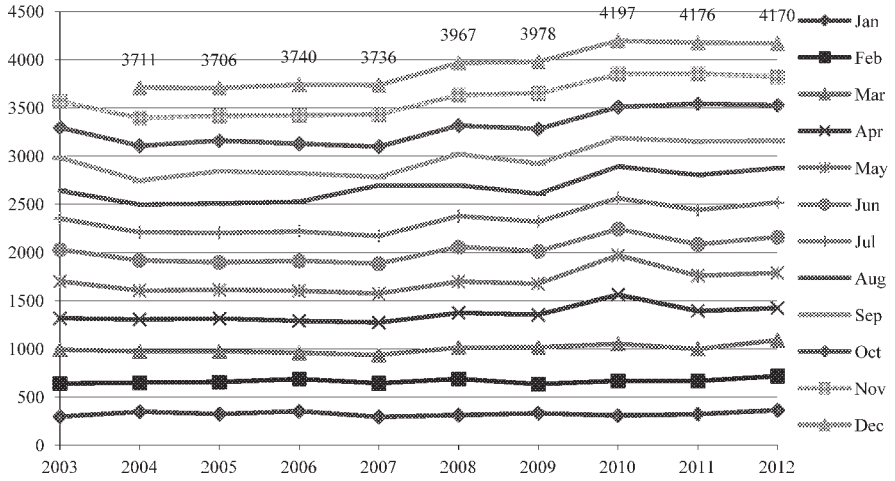
Fig.5 depicts infant (aged from 0 to 12 months) mortality. Annual infant mortality had a

Fig.2. Mortality.



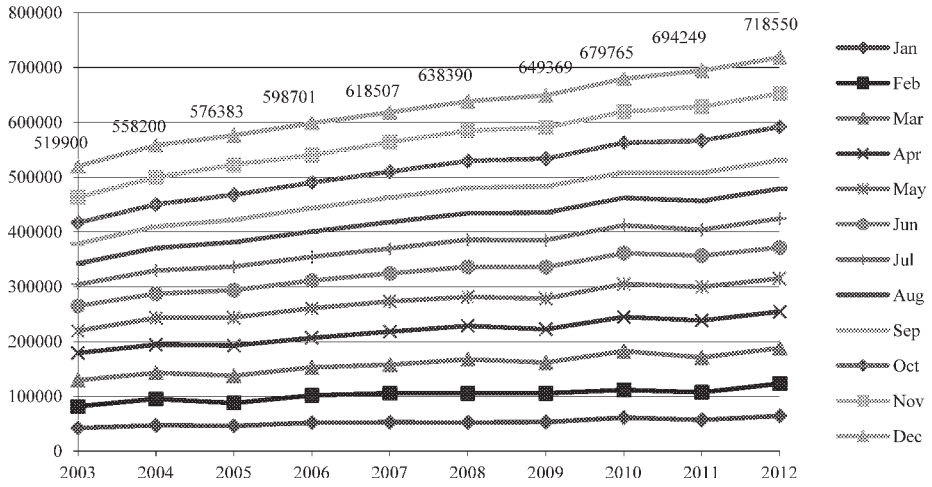
Data source: National Statistical Office of Mongolia

Fig.3. Deaths in hospital.



Data source: National Statistical Office of Mongolia

Fig.4. Number of people hospitalized.



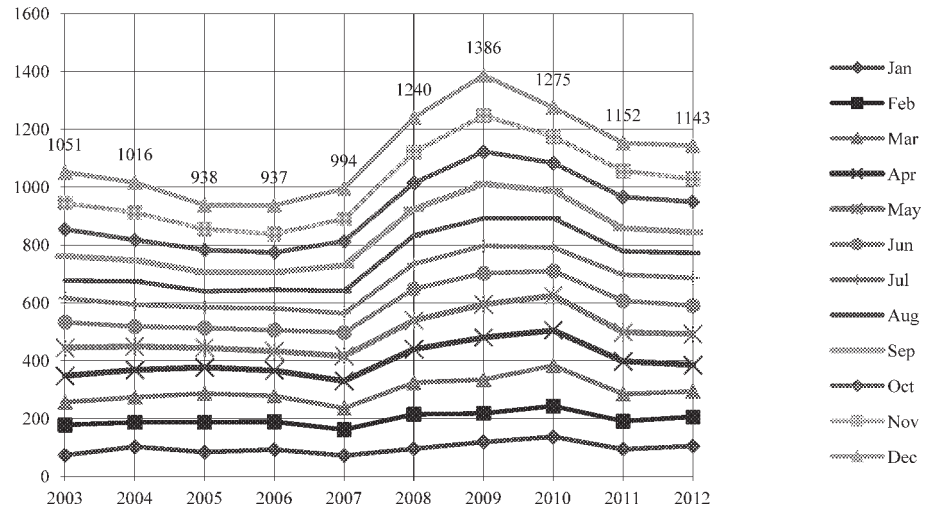
Data source: National Statistical Office of Mongolia

decreasing trend in 2010 after peak in 2009. However, there is a noticeable spike in March 2010, which continued until June, and from thereafter the pattern has been smoothed.

Fig.6 shows that child mortality or death of children from 1 to 5 years old had a significant spike in 2010. On a monthly basis, March, April and May had highest mortality cases in 2010.

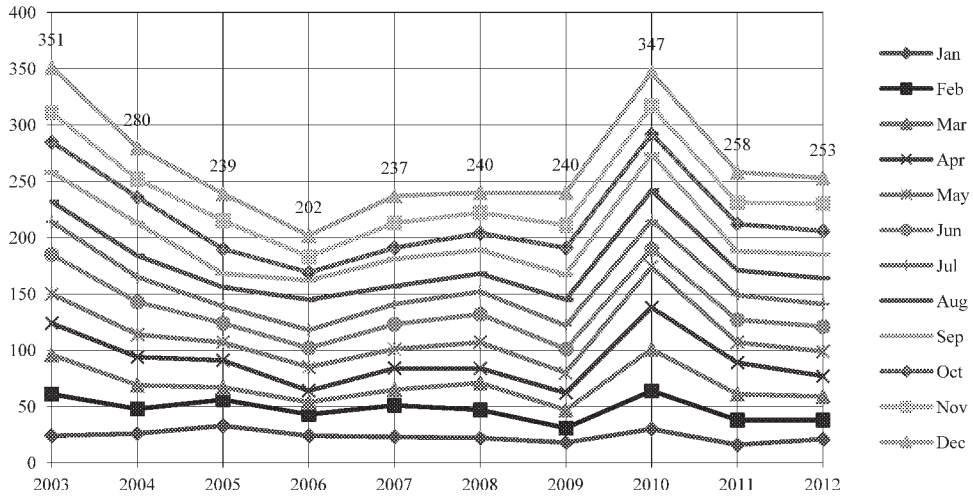
We cannot tie infant and child mortality directly to HDF payments, but it is possible that a

Fig.5. Infant mortality.



Data source: National Statistical Office of Mongolia

Fig.6. Child mortality.



Data source: National Statistical Office of Mongolia

change in the consumption pattern of adults and their negligence due to efforts to obtain the payments might be resulted somehow in higher infant and child mortality. The anxiety of people due to long hours of waiting at the bank branches to get their payments, sometimes resulting in fights and quarrels, was widely documented in media.

4 . Cash distribution and crimes

The committed crime offences continued to decrease in 2010 (19825 cases) with a noticeable fall starting from March, and reached lower rates in 2011 (19197 cases), when major cash distributions were paid. But, later in 2012, crimes raised up to 22089 cases. Within criminal offences, theft cases follow this decreasing trend (Fig.7).

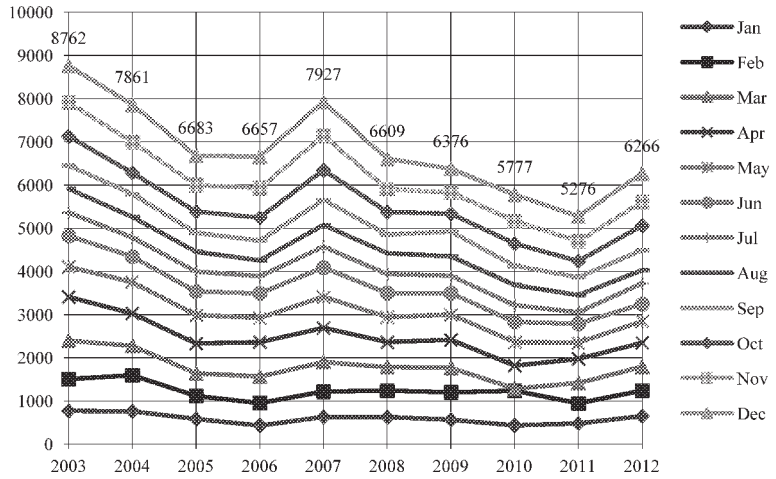
However, there is a sudden spike in February when cash was distributed to the elderly, the disabled, and children, but then in March of the same year it dropped to a record low of 50, compared to 563 cases in March 2009 and 469 cases in March 2011. The expectation of April cash distribution might have impeded theft intentions.

A significant drop in 2010 is observed for robbery cases (Fig.8) and in the number of people injured in crimes (Fig.9). It is possible that cash distribution prevented those who desperately needed cash from committing crime.

The number of robbery and people injured in crimes spiked in 2008[1)] and then decreased till 2010

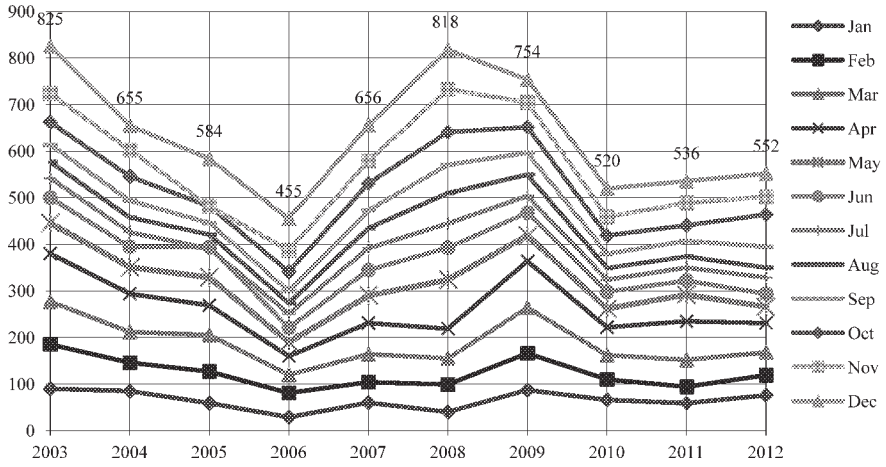
1）This spike in robbery and injured 2008 can be explained by July 1st riots following Parliamentary elections.

Fig.7. Theft cases



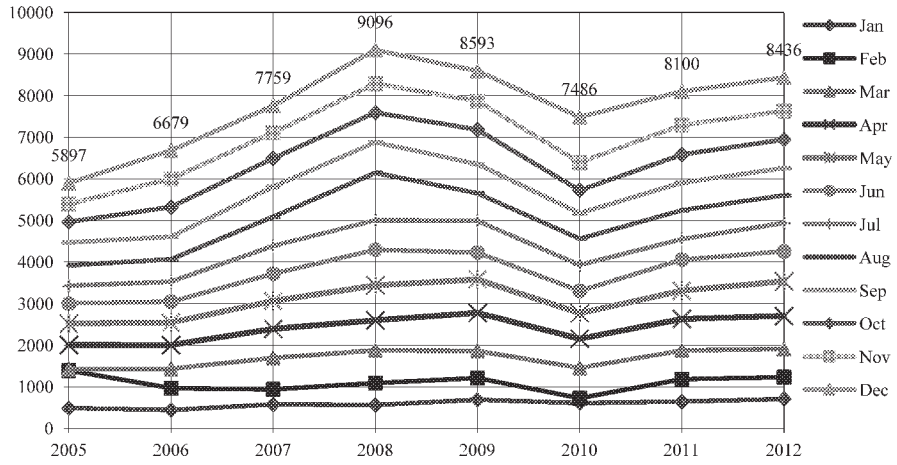
Data source: National Statistical Office of Mongolia

Fig.8. Committed robbery.



Data source: National Statistical Office of Mongolia

Fig.9. Injured in crimes



Source: National Statistical Office of Mongolia

but later started rising again. Overall, preliminary results are inconclusive as other factors might affect crimes more than distribution of cash. On the other hand the reliability of crime statistics in Mongolia is questionable with low rate of crime reports by victims[2].

5 . Cash distribution and price

Inflation in Mongolia is volatile and seasonally fluctuating as well. The main contributor to overall inflation is food prices, and within food, the main contributor is meat. To see whether the launch of cash distribution is associated with price fluctuations, we selected products whose price is determined entirely by the domestic market. For this purpose, the best candidate is meat, which produced and consumed domestically. Unpackaged domestic milk may also serve for this purpose[3].

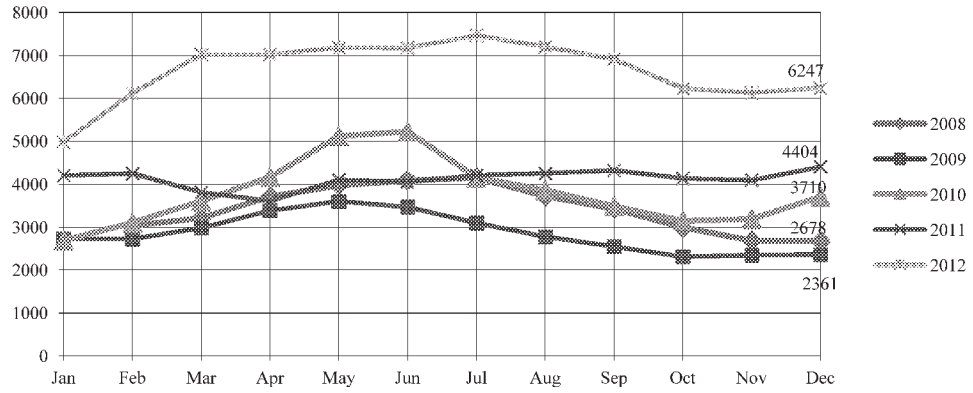
Mutton, the most used meat type by Mongolians, showed a significant spike in May and June 2010 (Fig.10). Beef also has the same trend, but is not pictured here. The price of unpacked milk also rose in May 2010 and decreased in June, but still the June 2010 price is higher compared to other years.

Both mutton and milk prices have showed sudden increase in April and May of 2010 but in later months price levels caught up the overall trend. This might indicate that suppliers of these two

2） Victims often refuse to report that they fell subject to crimes due to bureaucratic as well as corrupted actions of police forces and low expectation that criminals would be found and punished according to law.

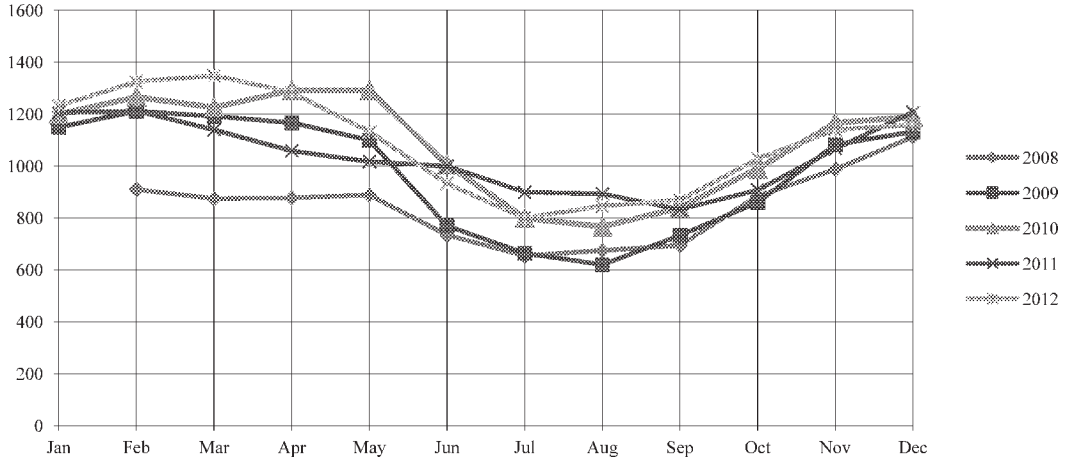
3） The majority of food product is imported from China or Russia. This imported product prices are affected by other factors as well. We choose meat and milk as purely domestically produced products which price would be affected by domestic demand driven by cash distribution.

Fig.10. Mutton price.



Data source: National Statistical Office of Mongolia

Fig.11. Unpacked milk price.



Data source: National Statistical Office of Mongolia

basic food products raised their prices as people first received their payments contributing in short-term inflation. However, in case of mutton price level significantly higher in 2012. One possible explanation is that monthly payments from mineral wealth made herders reluctant to supply meat on market as they have felt little urge to exchange their herds for needed cash, and preferred to raise the number of sheep to sell at higher price in future.

6 . Conclusion

The universal cash distribution to every citizen of Mongolia from country's mineral wealth is

associated with some noticeable changes in some socioeconomic indicators. Preliminary examination of some socioeconomic indicators point to some distortions that might be related to cash distribution. The rise in mortality rate in both adults and minors confirms results by Evans and Moore (2009). The number of hospitalized people rose from March 2010 following the February distribution to elders, children and the disabled. It is possible that these groups of individuals spent the money on health care they needed after receiving their payments. Examination of crime statistics of Mongolia showed little indication of the crime increase mentioned by Foley (2011). This might be related to poor data reliability related to low rates of crime reports in country. Inflation triggered by cash distribution is also documented in the literature. The examination of some domestically produced and consumed products such as meat and unpacked milk showed significant price spikes following cash distribution in the short term. There is a possibility of influence from other factors as well, but there is an indication of some fluctuations linked to cash distribution in Mongolia. Further quantitative analysis is needed to confirm these preliminary findings.

References

[1]. Cowper, S. (2007), "A Word to the Wise: Managing Alaska's Oil Wealth. Sovereign Wealth Management", J. Johnson-Calari and M. Rietveld, Central Banking Publications.

[2]. Daly, J. (2008), "Mongolia's Political Crisis and its Mineral Riches". Washington DC, Central Asia Caucasus Institute. July 23.

[3]. Devarajan, S and M.Giugale (2011), "How Africa Can Extract Big Benefits for Everyone from Natural Resources", the Guardian, UK, June 29.

[4]. Evans, W.N. and T. J. Moore (2009), "The Short-term Mortality Consequences of Income Receipt", NBER Working Paper No. 15311, Cambridge, MA: National Bureau of Economic Research.

[5]. Evans, W.N. and T. J. Moore (2012), "Liquidity, Economic Activity, and Mortality", *The Review of Economics and Statistics 94 (2)*, pp. 400-418.

[6]. Foley, F. (2011), "Welfare Payments and Crime", *The Review of Economics and Statistics 93(1)*, pp. 97-112.

[7]. Gillies, A. (2010), "Giving Money Away? The Politics of Direct Distribution in Resource Rich States", Center for Global Development, Working Paper 231.

[8]. Giugale, M. (2011), "Give Africans a Stake in Their Own Wealth", Huffington Post, The Internet Newspaper, June 22.

[9]. Goldsmith, S. (2002), "The Alaska Permanent Fund Dividend: An Experiment in Wealth Distribution", Geneva, Tofhe Basic Income European Network.

[10]. Moss, T. and L. Young (2009), "Saving Ghana from its Oil: the Case for Direct Cash Distribution", Washington DC, Center for Global Development, Working Paper 186.

[11]. Palley, T. (2003), "Combating the Natural Resource Curse with Citizen Revenue Distribution Funds: Oil and the Case of Iraq", Washington DC, Foreign Policy in Focus.

[12]. Segal, P. (2009), "Resource Rents, Redistribution, and Halving Global Poverty: The Resource Dividend", Oxford, Oxford Institute for Energy Studies, SP 22.

[13]. Tierney, J. (2003), "A Popular Idea: Give Oil Money to the People Rather than the Despots", New York Times, New York, September 10.

[14]. Zucco, C. (2010), "Cash-Transfers and Voting Behavior: Electoral Impacts of Brazil's Bolsa Familia Program", Princeton, Woodrow Wilson School, Princeton University, Unpublished manuscript.