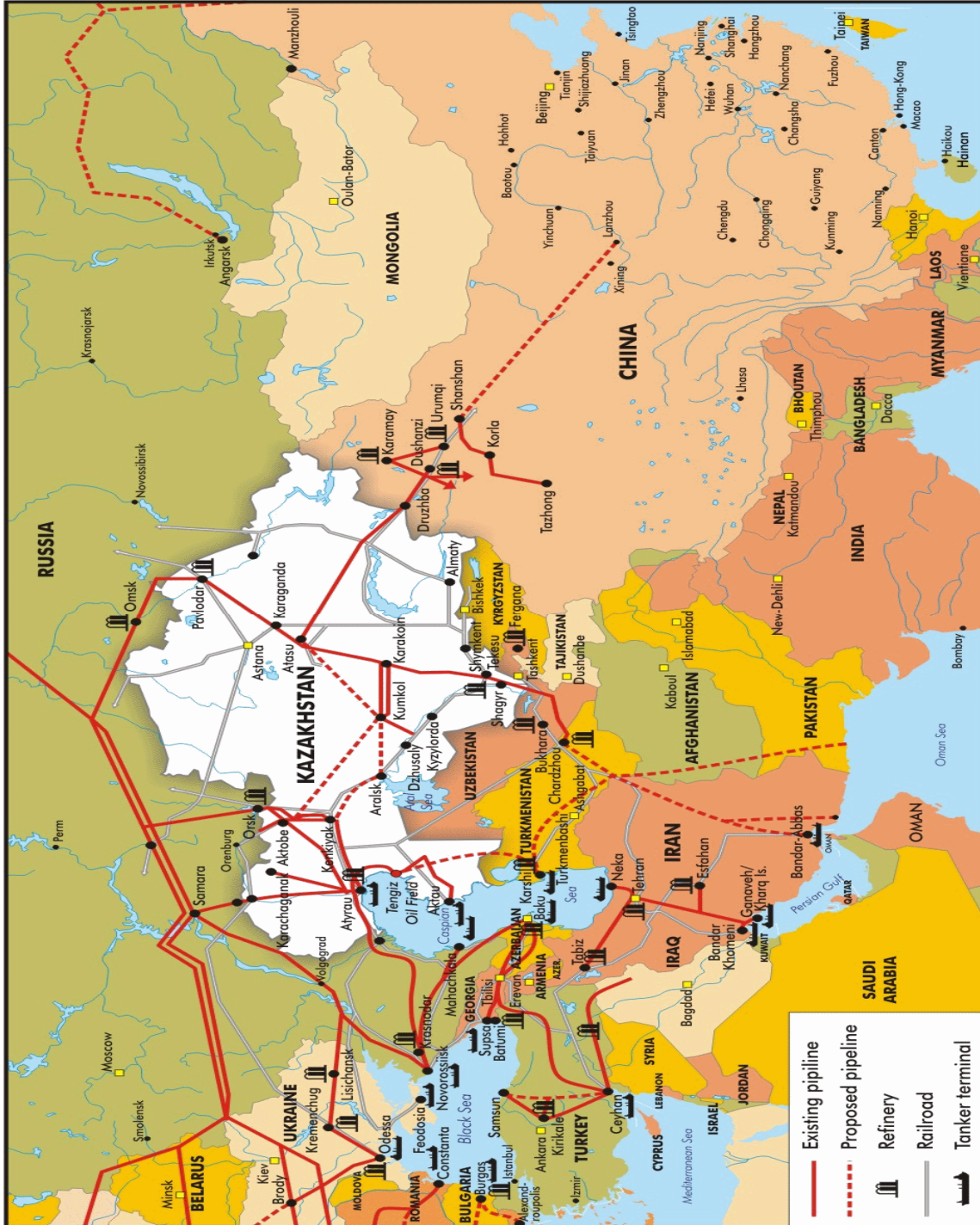


# Appendixes

## Appendix A: Oil and Gas Infrastructure in and through Kazakhstan



Source: U.S. Energy Information Administration

[http://www.eia.doe.gov/emew/cabs/Kazakhstan/images/IEA\\_oilmap.gif](http://www.eia.doe.gov/emew/cabs/Kazakhstan/images/IEA_oilmap.gif)

Appendix B: Short Run Vector Correlation Model

|               | <i>Parms</i> | <i>RMSE</i> | <i>R-sq</i> | <i>Chi2</i> | <i>P&gt;chi2</i> |
|---------------|--------------|-------------|-------------|-------------|------------------|
| <i>D_lgdp</i> | 14           | 0.077824    | 0.9231      | 300.0875    | 0.0000           |

|             | <i>Coef.</i> | <i>Std.Err.</i> | <i>z</i> | <i>P &gt;  z </i> | <i>[95% Coef. Interval]</i> |
|-------------|--------------|-----------------|----------|-------------------|-----------------------------|
| <i>_ce1</i> |              |                 |          |                   |                             |
| L1.         | -1.011769    | 0.5573436       | -1.82    | 0.069             | -2.104143    0.0806041      |
| <i>Δgdp</i> |              |                 |          |                   |                             |
| LD.         | -0.373593    | 0.419387        | -0.89    | 0.373             | -1.195576    0.4483904      |
| L2D.        | -0.4858011   | 0.2901756       | -1.67    | 0.094*            | -1.054535    0.0829328      |
| L3D.        | -0.6207895   | 0.1632239       | -3.80    | 0.000***          | -0.9407026    -0.3008765    |
| <i>Δop</i>  |              |                 |          |                   |                             |
| LD.         | 0.4487382    | 0.1026878       | 4.37     | 0.000***          | 0.2474738    0.6500026      |
| L2D.        | 0.4520748    | 0.1258526       | 3.59     | 0.000***          | 0.2054081    0.6987414      |
| L3D.        | 0.2079812    | 0.1124552       | 1.85     | 0.064*            | -0.012427    0.4283894      |
| <i>Δinf</i> |              |                 |          |                   |                             |
| LD.         | 0.0653386    | 0.1123947       | 0.58     | 0.561             | -0.1549509    0.2856282     |
| L2D.        | 0.0630668    | 0.0961006       | 0.66     | 0.512             | -0.1252868    0.2514204     |
| L3D.        | 0.1176075    | 0.0895204       | 1.31     | 0.189             | -0.0578494    0.2930643     |
| <i>Δexr</i> |              |                 |          |                   |                             |
| LD.         | 0.9327571    | 0.8616274       | 1.08     | 0.279             | -0.7560016    2.621516      |
| L2D.        | -0.1700012   | 0.6565942       | -0.26    | 0.796             | -1.456902    1.1169         |
| L3D.        | -0.2081477   | 0.4750293       | -0.44    | 0.661             | -1.139188    0.7228926      |
| <i>cons</i> | 0.000398     | 0.0126273       | 0.03     | 0.975             | -0.024351    0.025147       |

Source: Author's computations in STATA