

Scenario Analysis for a CAREC Regional Trade Agreement

David Wells Roland-Holst
*Global Computable General Equilibrium
(CGE) Model Expert*
dwrh@berkeley.edu



Objective and Methodology: A Central Asian Dynamic Forecasting Model

- Medium-term macroeconomic assessment of alternative FTA scenarios.
- The model for trade policy assessment is a prototype designed at the University of California, Berkeley.
- A global Computable General Equilibrium (CGE) model including 17 regions and 10 sectors.

Central Asian Regional General equilibrium model (CARGO)

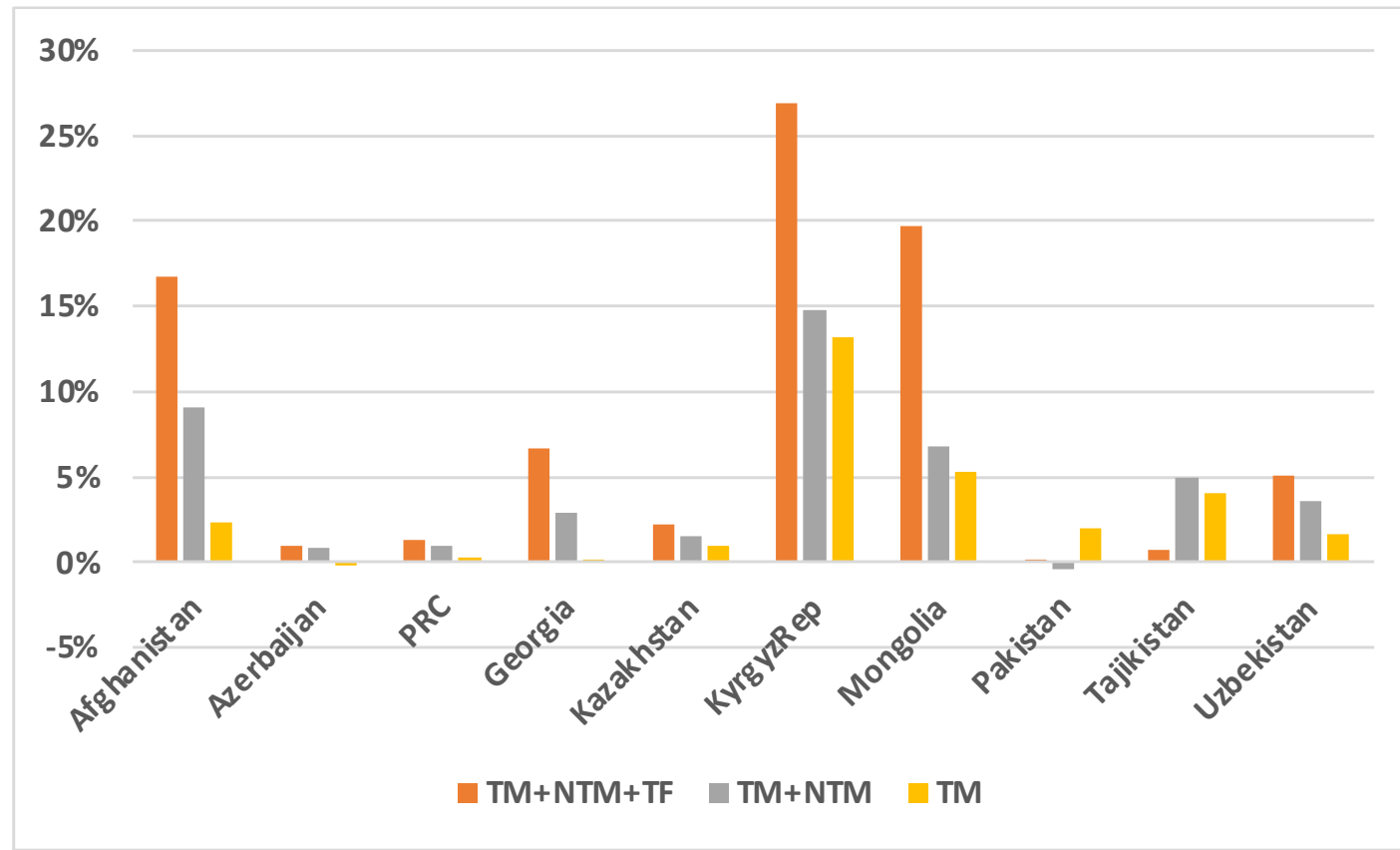
Countries/Regions			Sectors/Commodities		
	Label	Description		Label	Description
1	Afghanistan	Afghanistan	1	GrainsCrops	Grains and Crops
2	Azerbaijan	Azerbaijan	2	MeatLstk	Livestock and Meat Products
3	Georgia	Georgia	3	Extraction	Mining and Extraction
4	Kazakhstan	Kazakhstan	4	ProcFood	Processed Food
5	KyrgyzRep	KyrgyzRep	5	TextWapp	Textiles and Clothing
6	Mongolia	Mongolia	6	LightMnfc	Light Manufacturing
7	Pakistan	Pakistan	7	HeavyMnfc	Heavy Manufacturing
8	Tajikistan	Tajikistan	8	Util_Cons	Utilities and Construction
9	Uzbekistan	Uzbekistan	9	TransComm	Transport and Communication
10	PRC	People's Republic of China	10	OthServices	Other Services
11	HIYAsia	High Income Asia			
12	Russia	Russian Federation			
13	OtherAsia	Other Asia			
14	SouthAsia	South Asia			
15	NAmerica	North America			
16	EU_28	European Union 28			
17	ROW	Rest of World			

FTA Scenarios

Scenario		Characteristics
Baseline	Baseline	Business as Usual - maintain existing policies and no external shocks
Scenario 1	CAREC FTA	All CAREC member countries take three steps toward regional integration, abolishing bilateral tariffs and NTMs, and reducing trade margins by 50%.
Scenario 2	Asia Unilateral	CAREC FTA members (from Scenario 1) extend import liberalization to the rest of Asia, without reciprocity.
Scenario 3	Global Unilateral	CAREC FTA extending tariff and NTM reductions to all trading partners without reciprocity.
Scenario 4	Tech Productivity	The previous scenario (Asia Unilateral) with productivity benefits from digital tech transfer and e-commerce.
Scenario 5	CAREC FTA-Goods	CAREC FTA liberalizing trade in Goods only.
Scenario 6	CAREC FTA-Services	CAREC FTA liberalizing trade in Services only.

Scenario 1: Tariff reductions capture only a fraction of FTA potential gains

(Real GDP, percent changes from Baseline in 2031)



Core Findings

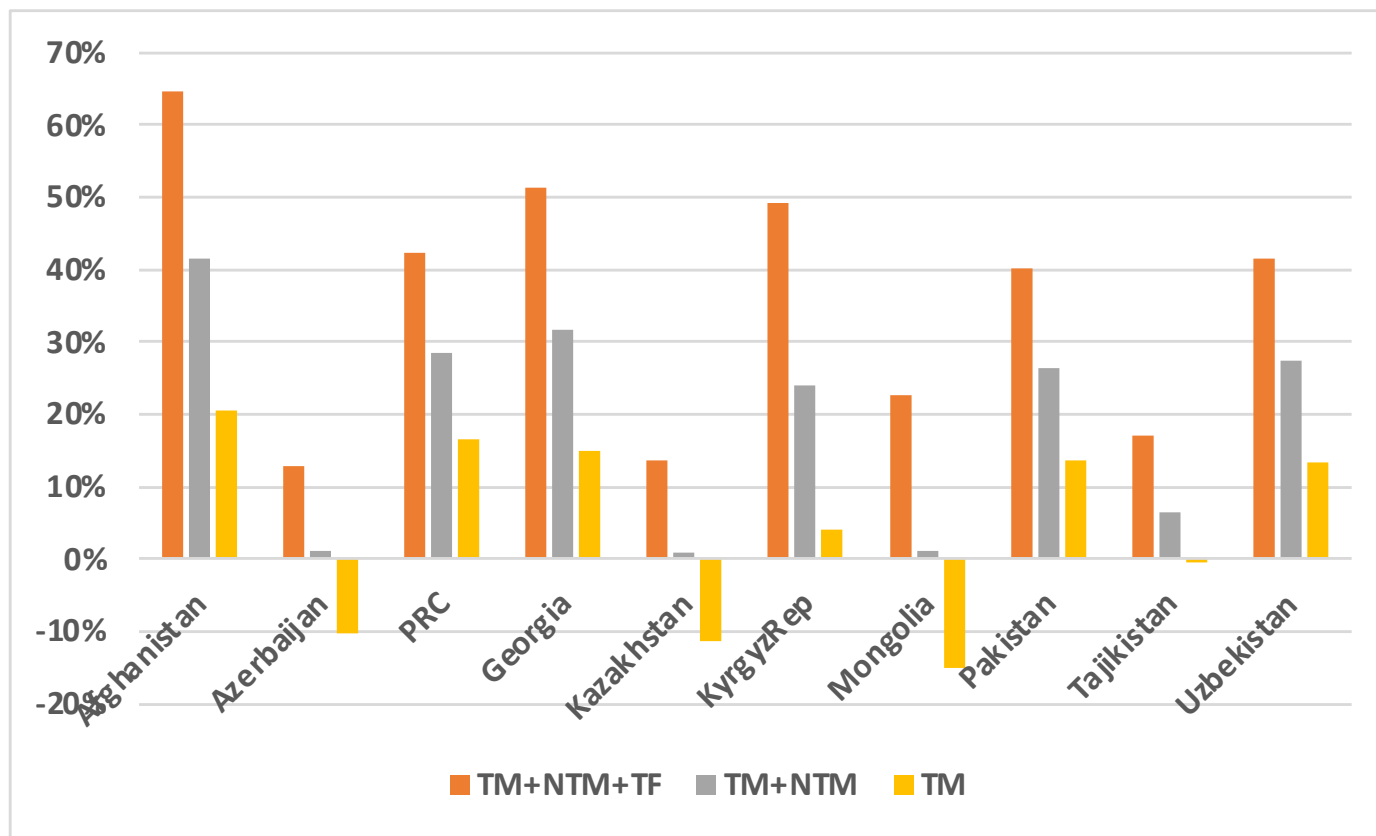
- 1. Aggregate efficiency gains follow from removing trade distortions** – Trade liberalization in all FTA scenarios reduces price distortions, improving efficiency and growth prospects. For most countries, however, tariff reductions offer only a fraction of these potential gains.
- 2. Increasing FTA membership generally increases aggregate and member country benefits** - Enlarging the market covered by an agreement confers greater benefits on most members.
- 3. Member benefits depend on intra-FTA trade shares** - A country's gains depend on its intra-FTA trade as a share of GDP as much as on prior protection levels.

Core Findings, continued

- 4. Diversity of initial conditions offers scope for negotiating the implementation pathway** - Imbalances in estimated aggregate adjustments across the CAREC economies, both in percentage and absolute terms, suggest opportunities for negotiated approaches to mitigate adjustment costs and offer incentives for progress toward market enlargement and regional integration.
- 5. A CAREC FTA has the potential to promote economic convergence** - The estimates in this study suggest that lower income countries experience higher growth dividends from FTA membership. In other words, a CAREC FTA can promote economic convergence, with lower income countries grower faster and reducing regional inequalities.
- 6. Improving individual CAREC country prospects for Foreign Direct Investment and Technology Transfer can multiply the benefits of an FTA** - Although multilateral financial liberalization is too complex a topic to be addressed in detail in this study, it is essential to remind countries that access to external capital, technology, and export market access can dramatically leverage the growth benefits of trade opening.

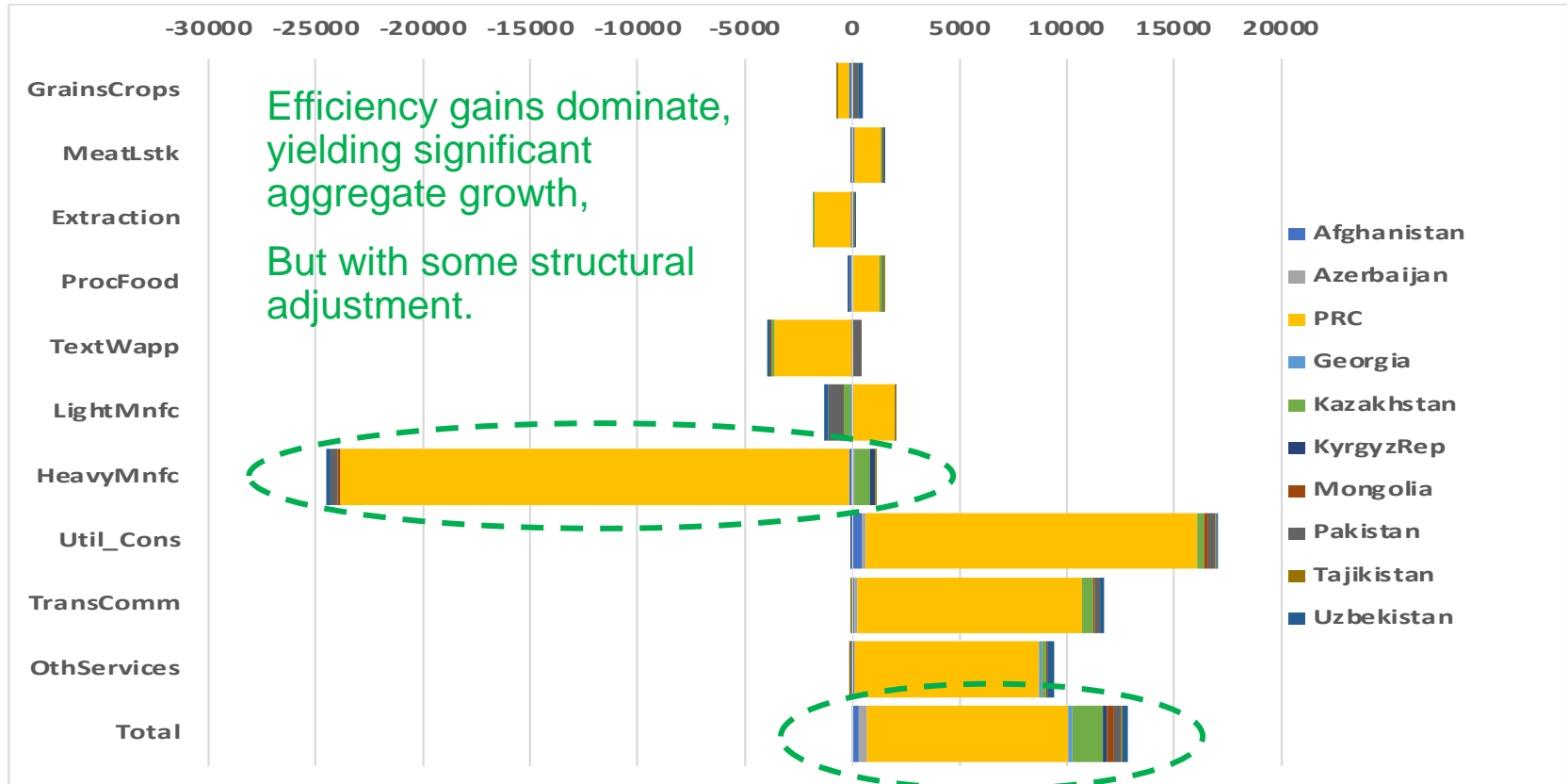
Scenario 4: FDI, technology transfer, and productivity growth

(Real GDP, percent changes from Baseline in 2031)



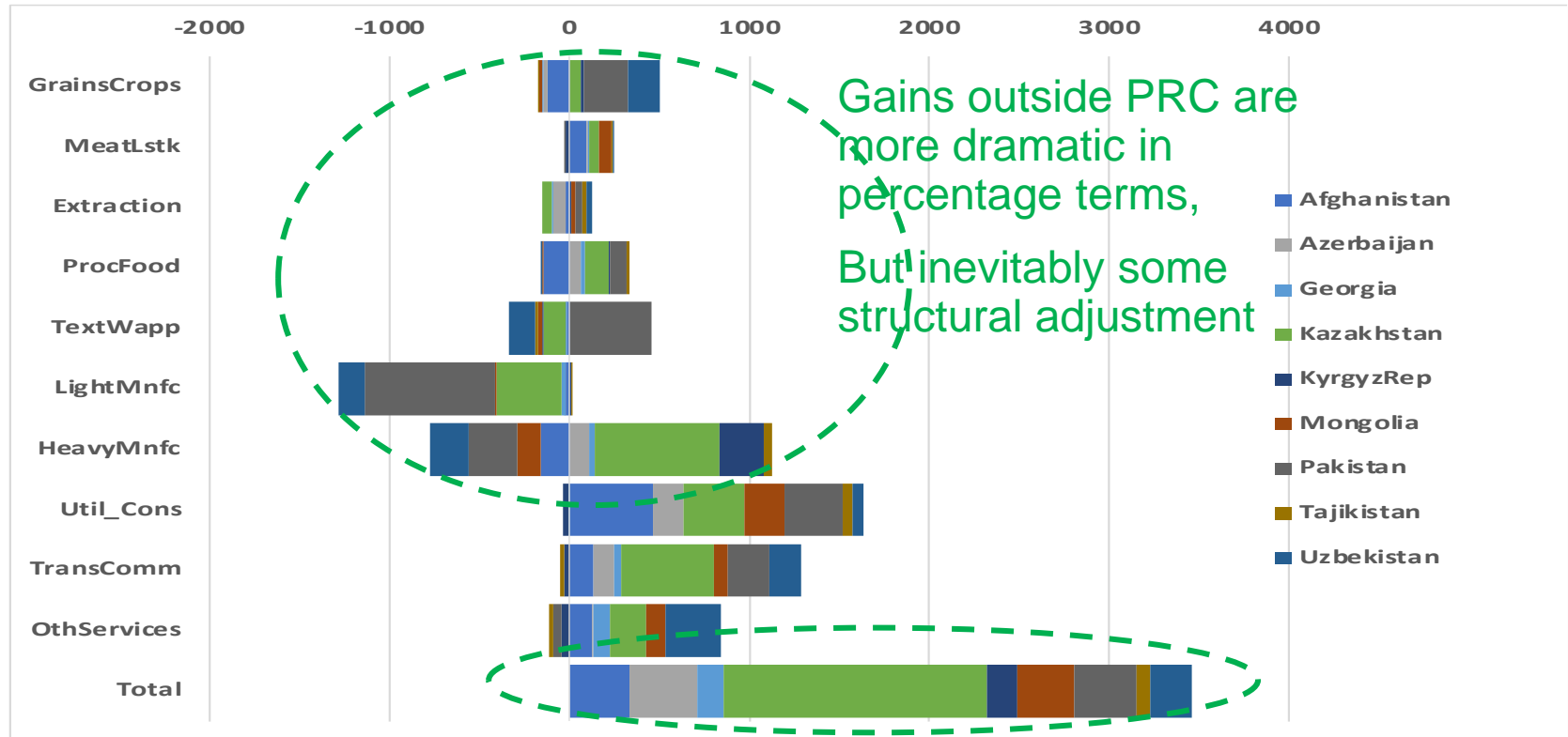
Sectoral FTA responses: Output, all CAREC

(USD billions, changes from Baseline in 2031)



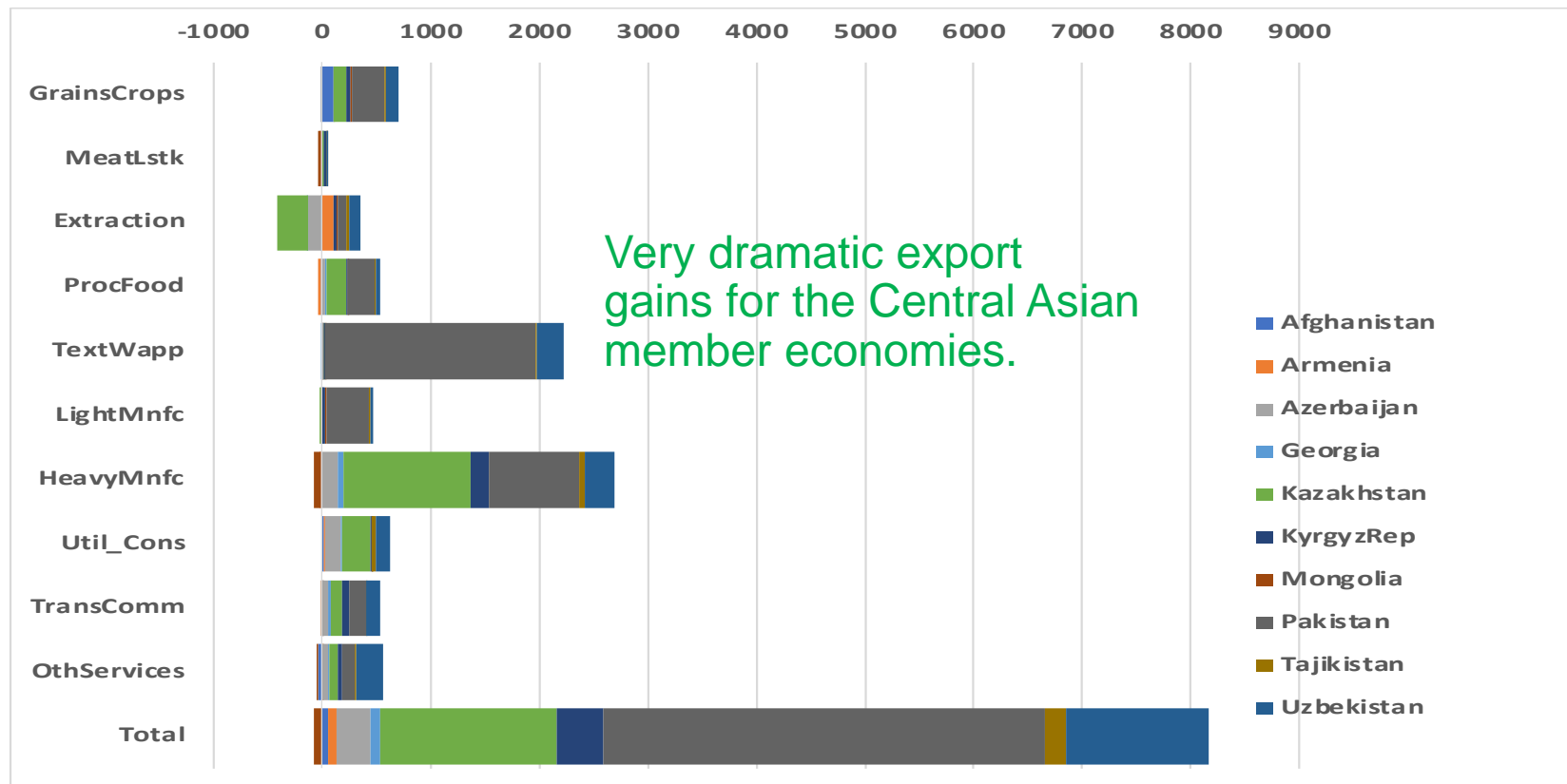
Sectoral FTA responses: Output, CAREC ex-PRC

(USD billions, changes from Baseline in 2031)



Sectoral FTA responses: Exports CAREC ex-PRC

(USD billion, changes from Baseline in 2031)



Thank you!

Comments and questions welcome
dwrh@berkeley.edu

